COMMUNITY COHESION
and
SOCIAL IMPACT STUDY
FINAL REPORT

FLOYD COUNTY, KENTUCKY

LEVISA FORK

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PREPARED FOR:

U.S. ARMY CORPS OF ENGINEERS, HUNTINGTON DISTRICT

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TABLE OF CONTENTS

PART 1: EXISTING COMMUNITY COHESION

FIGURES

APPENDICES

PART 1: EXISTING COMMUNITY COHESION

Introduction and Methodology

INTRODUCTION

Eastern Kentucky, southern West Virginia, and southwest Virginia experienced major flooding in 1977 due to heavy rain and rising waters of the Big Sandy River and its tributaries. Located in eastern Kentucky, Floyd County was impacted by severe flooding from the Levisa Fork River (Figure 1). The 1977 flood caused extensive damage to both residential and commercial structures along the river and its tributaries within the county.

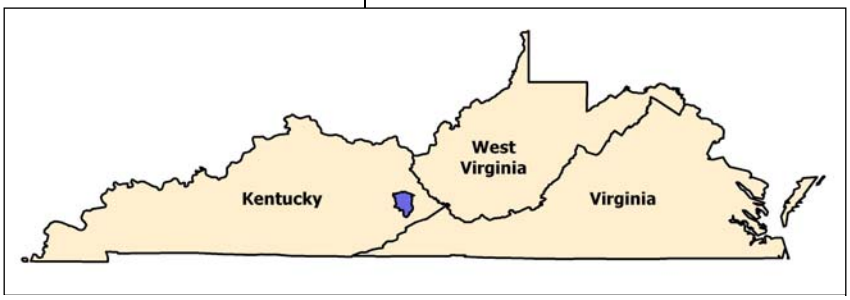


Figure 1: Floyd County Regional Map

Following flooding in 1977, Congress authorized the U.S. Army Corps of Engineers (Corps) to provide flood protection to impacted areas, including areas along the Levisa Fork and its tributaries in Floyd County. The Corps is preparing a study to: 1) determine the extent of flooding in the Levisa Fork Basin, and 2) identify potential measures to minimize future flood damage.

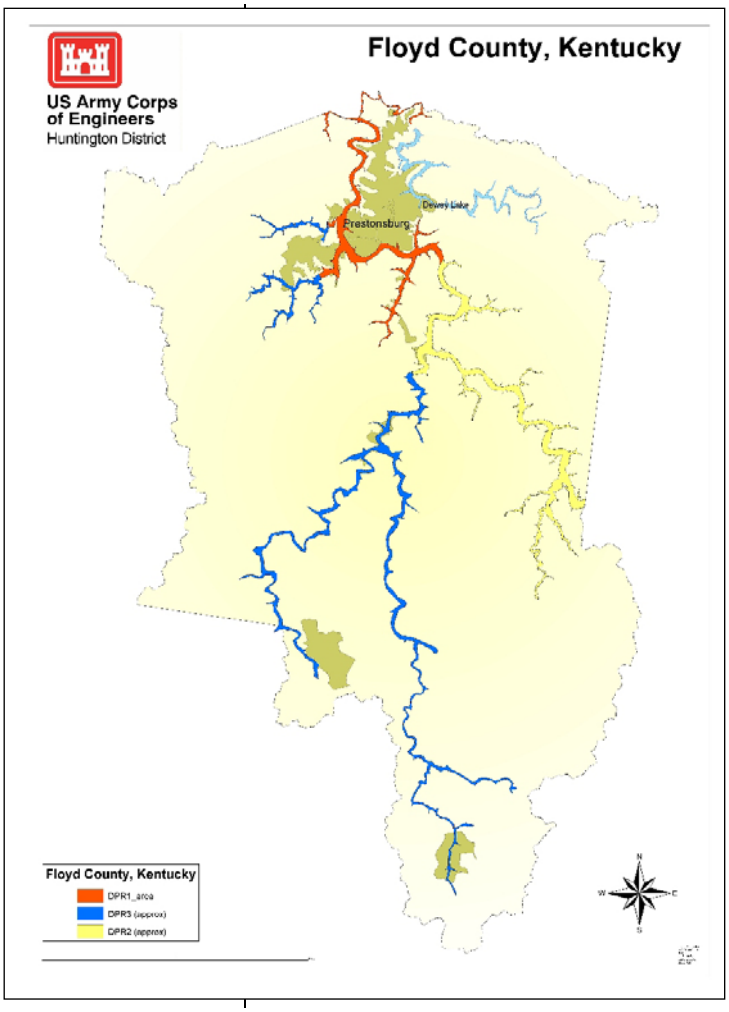


Figure 2: Floyd County Section 202 Project Phasing Plan

In the first stage of the study, the Corps recognized a county-wide study would be too large and extensive; therefore, the county was divided into three project study areas. A Detailed Project Report (DPR) will be prepared for each of the three project study areas or three phases of the Floyd County Section 202 Project. The Corps recently began more detailed study of the first project study area, called DPR I. Geographically, DPR I addresses flood damage reduction measures within the Prestonsburg corporate boundaries and downstream along the Levisa Fork River to the Johnson County boundary. Based upon the information gathered to date, the Corps identified several alternatives to reduce future flood damage that include both structural and nonstructural flood protection methods.

The Corps contracted with Parsons Brinckerhoff, Inc. (Contractor) to survey structures and to prepare a community cohesion and social impact analysis of the identified flood protection alternatives in Floyd County. The project area encompasses Section 202 Program eligible structures along the Levisa Fork River and its tributaries within the geographic boundaries of DPR I. The tributaries included in DPR I are Bull, Paint and Johns Creeks, and portions of Abbott and Middle Creeks near the Prestonsburg corporate boundaries (Figure 2). Residential and nonresidential surveys were completed in Prestonsburg, Auxier, and East Point.

Separate surveys were conducted for eligible structures in residential and nonresidential areas. In addition, separate surveys were conducted for areas that may be affected by structural and nonstructural alternative measures. As part of the community cohesion and social impact analysis, the Contractor also completed a socio-economic analysis, which is included as Appendix A to this report. The survey results and conclusions are presented separately for each type of survey and for the Prestonsburg area to allow for direct analysis of each area. The structural alternative survey results and conclusions are presented first, followed by the nonstructural alternative survey results and conclusions. Responses to questions about study knowledge, future public involvement, and special community issues and concerns are presented in separate sections at the end of Part 1 of this report.

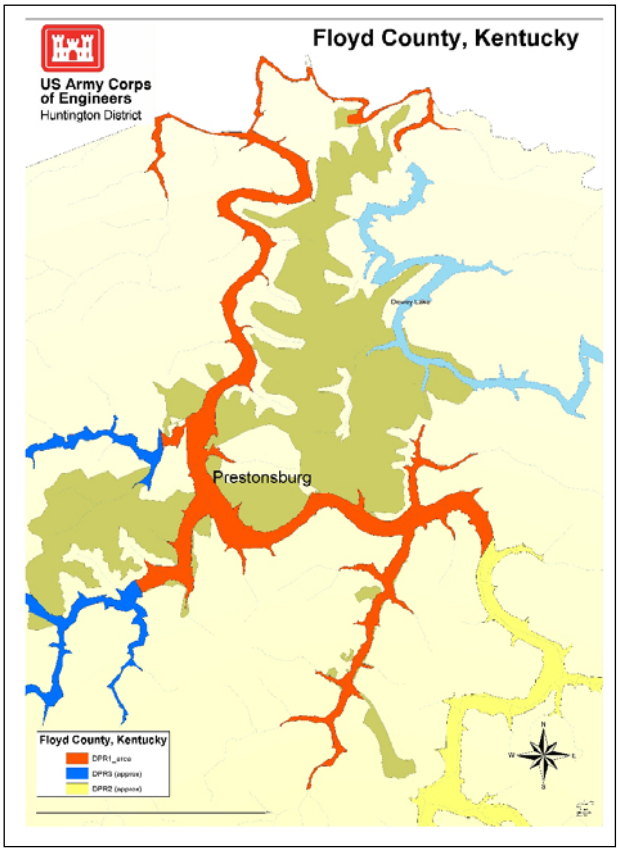


Figure 3: DPR I – Prestonsburg and Lower Levisa Fork shown in orange.

METHODOLOGY

Survey Methodology

Approximately 6,300 structures in the Levisa Fork Basin of Floyd County may be eligible for the Section 202 Program based on their location within the 100-year floodplain. The total number of eligible structures is expected to change as more detailed information regarding first floor elevations for the entire county becomes available. Within DPR I, the Corps estimates there are 1,376 structures, of which 626 structures are eligible for the Section 202 Program (45.5 percent). The Contractor was tasked with completing 355 structure surveys that cover a variety of topics to assess program participation rates and measure community cohesion. More specifically, the surveys aimed to:

1) document structure and resident or owner/operator characteristics;
2) evaluate feelings and concerns about flooding;
3) evaluate feelings and concerns about the community;
4) determine relocation preferences;
5) determine willingness to participate in a voluntary, nonstructural flood protection program;
6) determine feelings about acquisition for the greater good;
7) evaluate community flood protection preferences; and
8) identify current level of public knowledge and future communication preferences.

Separate surveys were conducted for four groups of eligible structures: 1) Structural Alternative, Nonresidential Structure; 2) Structural Alternative, Residential Structure; 3) Nonstructural Alternative, Nonresidential Structure; and 4) Nonstructural Alternative, Residential Structure. All four survey instruments are presented in Appendix B of this report.

Zones	Total Surveys To Be Completed	Original Total Structure Count	Percentage
Zone A	68	68	100.0%
Zone B	75	374	20.1%
Zone C	38	190	20.0%
Zone D	38	193	19.7%
Zone E	80	415	19.3%
Zone F	56	278	20.1%
Total	355	1,518	23.4%

The DPR I project area was divided into six geographic zones, zones A through F. The zones were originally believed to have 1,518 total structures. Zones A and B encompass structures that may be

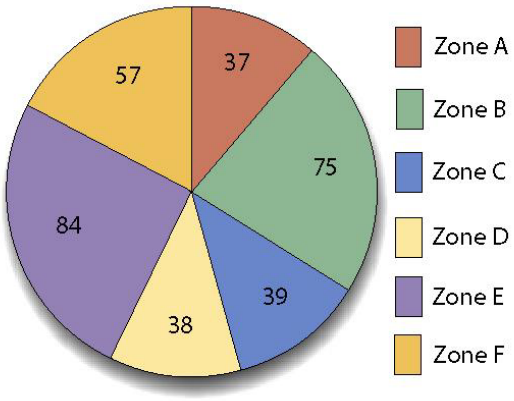
affected by a structural measure within Prestonsburg. Zone A structures could be directly impacted by a structural measure and Zone B structures could be protected by a structural measure. Due to the potential impacts on Zone A structures, the Contractor visited occupants/owners of all 68 structures (100 percent) in an attempt to complete the questionnaire through a personal interview. Within Zone A, a minimum of three attempts to complete a personal interview were made at various times of day. If no contact was made, a survey form with a pre-addressed and stamped envelope was left for the occupant/owner to complete and mail back to the Contractor. Instances where an occupant/owner refused to be interviewed or where a structure was demolished or vacant were noted in the field.

Within Zone B, the Contractor was tasked with surveying 75 structures (approximately 20 percent of all structures in the zone), both residential (30 structures) and nonresidential (45 structures). The Corps requested the surveyed structures be evenly distributed to provide an adequate geographic sample of the zone. The Contractor independently selected structures to meet the requirements established by the Corps. Attempts were made to conduct personal interviews until the requirements were satisfied.

Zones C, D, E and F encompass structures that may be eligible for nonstructural flood protection measures. Within these zones, the Contractor was tasked with surveying a total of 212 structures (approximately 20 percent of all structures in each of the four zones), both residential (157 structures) and nonresidential (55 structures). The Contractor independently selected structures to provide an adequate geographic sampling and meet the quota established by the Corps. Attempts were made to conduct personal interviews until the requirements were satisfied.

After field verification, the Corps estimated the total number of structures to be 1,376, a decline of 142 structures. The Contractor maintained the same quota of surveys to be completed; therefore, a slightly higher overall percentage of surveys were completed (24.0 percent).

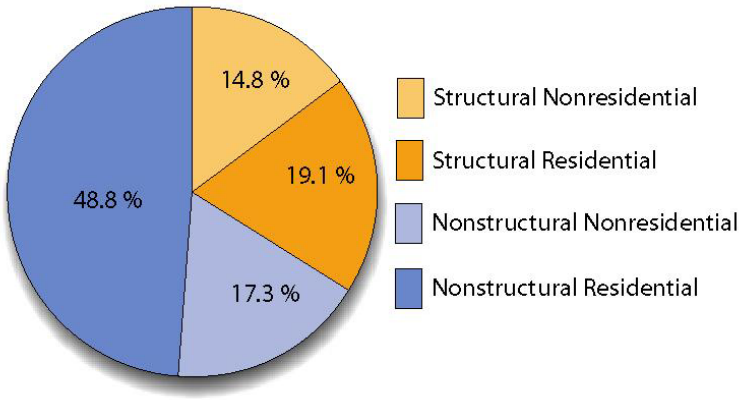
Zones	Total Surveys Completed	Verified Total Structure Count	Percentage
Zone A	37	71	52.1%
Zone B	75	428	17.5%
Zone C	39	128	30.5%
Zone D	38	101	37.6%
Zone E	84	275	30.5%
Zone F	57	137	41.6%
Outside of Any Zone	0	236	0.0%
Total	330	1,376	24.0%



A total of 330 structures were surveyed throughout the six zones (93.0 percent of the original sample). The Corps determined that 626 structures of the total 1,376 structures within DPR I are eligible for the Section 202 Program. Of the 330 structures surveyed, 184 structures are currently considered eligible based upon first floor elevations.

Zones	Total Eligible & Surveyed Structures	Total Surveys Completed	Percentage
Zone A	13	37	35.1%
Zone B	55	75	73.3%
Zone C	29	39	74.4%
Zone D	3	38	7.9%
Zone E	44	84	52.4%
Zone F	40	57	70.2%
Total	184	330	55.8%

Appendix C presents a list of each structure number surveyed. For Zone A structures, the list documents whether a questionnaire was completed for that structure and provides a reason for those that were not completed. Of the respondents surveyed, 14.8 percent answered the structural nonresidential questionnaire, 19.1 percent answered the structural residential questionnaire, 17.3 percent answered the nonstructural nonresidential questionnaire and 48.8 percent answered the nonstructural residential questionnaire. Responses to the surveys were entered into a database management program, Microsoft Access.



Questionnaire responses, coupled with the socio-economic data, were analyzed to determine willingness of participation in the program, general community cohesion, and anticipated social impacts of nonstructural and structural alternatives.

Existing Community Cohesion Methodology

The measurement of community cohesion is imprecise and relatively difficult to ascertain because it is such an intangible concept. However, several factors which are measurable lend themselves to the evaluation of a community's cohesiveness. These factors are measurable based upon survey results or socio-economic data. For residential areas, these factors are:

1) Term of occupancy of structure;
2) Frequency of visits with friends and family;
3) Number of families with children;
4) Rate of owner-occupancy;
5) Employment status;
6) Relocation preferences; and
7) Special characteristics of the neighborhood.

Among nonresidential areas, these factors are:

1) Term of occupancy of structure;
2) Rate of owner-occupancy;
3) Relocation preferences; and
4) Special characteristics of the neighborhood.

Overall existing community cohesion is discussed at the end of both the structural and nonstructural survey sections. Community cohesion and social impacts of the proposed alternatives will be evaluated in Part 2 of this report.

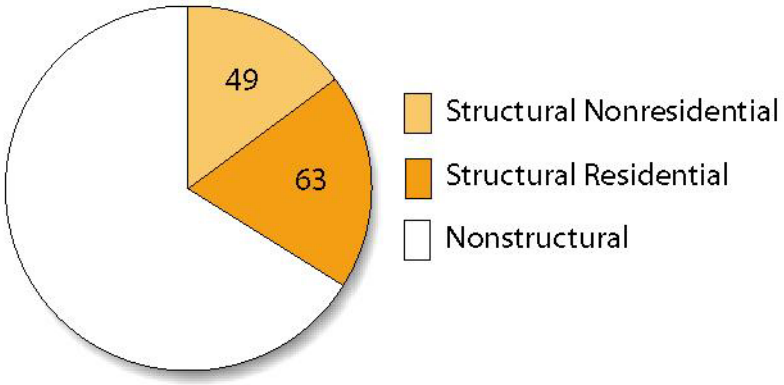
Structural Area Survey Results and Community Cohesion

INTRODUCTION

Based upon the structural flood protection alternatives developed prior to the Contractor conducting personal interviews, the Corps developed a list of 68 structures in Zone A and 351 structures in Zone B. Zones A and B combine to make up the structural area where 68 (100 percent) of Zone A structures and 75 (21.4 percent) of Zone B structures were to be surveyed. The structures within Zones A and B would be protected by a floodwall and levee system within Prestonsburg. Of the 143 structures to be interviewed, respondents from 112 structures (78.3 percent) participated in personal interviews.

Of the 112 questionnaires completed, nonresidential responses accounted for 43.8 percent (49 responses) and residential responses accounted for the remaining 56.2 percent (63 responses).

Structural area survey results will be presented in several ways. The structural nonresidential survey results will be presented first, followed by the structural residential survey results. The format in which the survey results and conclusions are discussed is as follows: 1) resident and family (only structural residential section), 2) structures and flooding, 3) feelings and concerns about the community and flooding, and 4) participation rate. Overall existing community cohesion for the structural area will be discussed at the end of this section.



NONRESIDENTIAL SURVEYS

Structures and Flooding

Post Office and Community (Questions 1A and 1B)

Of the 49 respondents to the structural, nonresidential survey, all received mail through the Prestonsburg post office. Additionally, all responded that they live in Prestonsburg.

Occupied Tenure, Ownership and Structure Age (Questions 2, 3 and 4)

The average length of time each respondent has occupied their structure is 18.2 years, thus many of the owner/operators did not occupy their current location at the time of the 1977 flood. Twelve respondents indicated they have remained in the same location for more than 30 years (24.5 percent), although 20 respondents indicated their tenure was less than ten years (40.8 percent).

A majority of structures are owned (67.3 percent) rather than rented (32.7 percent).

Only 43 of the 49 respondents knew the approximate age of their structure. Of these 43, structure age varied from 4 years to 100 years, with an average of 40.6 years. A majority of the structures were 30 years old or older (30 structures), two structures were between 20 and 29 years old, ten structures were between 10 and 19 years old, and the remaining structure was less than 10 years old. Because this area includes well-established downtown Prestonsburg, many of the surveyed structures were built prior to the 1977 flood.

Knowledge about Flooding, Flood Insurance, Number of Times Experienced Flooding and Experiences as a Result of Flooding (Questions 6, 7, 9 and 10)

Question 6, 7, 9 and 10 are grouped together here because they all refer to flooding and its effects. Of the 49 respondents, one respondent was unable to answer Question 6. Of the 48 who were able to answer, 29 answered in the affirmative - that they would have moved to the location even if they knew it could be flooded (60.4 percent) and many said they were aware of the possibility, but chose to locate there despite the chance of flooding. Nineteen respondents answered in the negative – that they would not have moved to the location if they had been aware of the possibility of flooding (39.6 percent).

Five respondents were unable to answer Question 7 concerning the purchase of flood insurance. Of the remaining 44 respondents, 18 indicated they do currently pay for flood insurance (40.9 percent) and

26 said they do not currently pay for flood insurance (59.1 percent). Many of the respondents who were unable to answer this question were business operators (managers or employees) rather than owners, thus many were not knowledgeable about whether this was required for the structure.

A majority of respondents (79.6 percent) indicated they had never experienced flooding while occupying their location. Five structures flooded once (10.2 percent) and an additional five reported flooding twice during their occupation of the building (10.2 percent). A majority of respondents (75.0 percent) who have occupied their location for 30 or more years reported experiencing flooding once, if not twice.

Of the ten respondents who experienced flooding, 80.0 percent experienced flood damage, 60.0 percent experienced lost work days and wages, 50.0 percent experienced employees missing work, 20.0 percent experienced dislocation from work and none reported medical expenses related to flooding.

Conclusions

Term of structure occupancy and owner-occupancy indicate these areas are fairly static. A majority of the nonresidential structures in Prestonsburg are more than 30 years old, with an average age among respondents of 40.6 years. While some buildings are more recent, such as the Floyd County Justice Center, they still maintain the dense pattern of development in the downtown. Also, a majority of structures are owner-occupied and a majority of owner/operators have occupied the structure for more than ten years. These statistics indicate a high level of community cohesion.

The commercial areas surveyed include downtown Prestonsburg (densely developed) and roadway-oriented development along North Lake Drive (geographically dispersed). The physical attributes of the downtown lend themselves to higher community cohesion among owner/operators than other roadway-oriented businesses throughout the county.

Feelings and Concerns about the Community and Flooding

Special Characteristics of the Neighborhood (Question 5)

When asked if there were things about the neighborhood that were special to them, 21 respondents (42.9 percent) answered that there was nothing special about the neighborhood. The responses from those who feel the neighborhood has special characteristics (28 respondents) were relatively consistent. Responses were grouped into the following categories:

Special Characteristics	Number of Responses	% of Total Responses
Good Location	15	53.6%
Good Access, Visibility, High Traffic Volume	9	32.1%
Convenient	5	17.9%
Building	2	7.1%
Flat Land	2	7.1%
Parking	2	7.1%
Local Business	1	3.6%
Sentimental	1	3.6%

Concern about Flooding (Question 8)

Of the 49 respondents, 4.1 percent were very concerned about future flooding, 38.8 percent were somewhat concerned and the remaining 57.1 percent were not at all concerned about flooding. The lack of concern by a significant percentage of respondents may be attributed to the almost 30-year gap between the survey and the 1977 flood, and almost 50 years since the 1957 flood of record for the project area. Additionally, the length of time interviewees have occupied their buildings may affect respondent attitudes about flooding. Respondents who began operating businesses in the area after 1977 may not remember the damage caused by a major flood, and, as a result, are less concerned about future flooding. Of the 12 respondents who have occupied their structures for 30 or more years, seven (58.3 percent) indicated they were somewhat concerned about flooding. Of the 29 respondents who have occupied their structures for ten or more years, 13 (44.8 percent) indicated they were somewhat concerned about flooding. The respondents who said they were very concerned about flooding have occupied their structures for less than ten years.

Feelings and Major Concerns about Acquisition (Questions 11 and 13)

A total of 36.7 percent (18 respondents) either strongly support or support their building being acquired in order to construct a larger flood protection project that would protect part or all of the community. Nine respondents (18.4 percent) had no opinion about being acquired as part of a larger flood protection project, and 22 respondents (44.9 percent) either strongly oppose or oppose being acquired.

When asked about their biggest concerns if their structure and property were to be acquired by the Government, many respondents identified more than one concern. Identifying more than one major concern indicates respondents' overall concern regarding acquisition is

high. The most frequent response was "finding a good location to move to."

Major Concerns about Acquisition	Number of Responses	% of Total Respondents
Finding a Good Location to Move to	42	85.7%
Fair Price and Moving Expenses	29	59.2%
Locating Suitable Building	28	57.1%
Maintaining Business Relationships and/or Customer Base	25	51.0%
Cost of Re-establishing Business at a New Location	23	46.9%
Other Concerns	8	16.3%
No Concerns	0	0.0%

Other concerns include: church growth, finding a new site in Prestonsburg that is flat, finding a new location with the same amenities, recently completed new parsonage, loss of business during a move, loss of employment for the city, maintaining a vital business community, and losing the location's sentimental value. All of these concerns were mentioned once by respondents.

Moving Preferences (Question 12)

Of the 49 respondents, 3 respondents were not able to answer this question. Of the 46 respondents who were able to answer, 91.3 percent prefer to stay within the neighborhood or community if they were required to relocate. Several owner/occupants expressed concern that, while they prefer to stay in the community or neighborhood for various reasons, there is a lack of developable land within the community and Floyd County. Three respondents would prefer to relocate to another part of Floyd County, and one respondent indicated they would move to another county within Kentucky.

Major Concerns about Floodwall or Levee (Question 14)

When asked about major concerns about a new levee or floodwall being built near their structure, as a group, respondents indicated that the appearance and type of construction of the wall were their largest concern (40.8 percent respectively). Respondents were allowed to "check all that apply," thus the total number of responses (127) exceeds the number of respondents (49). Major concerns for nonresidential structural respondents are included in the following table.

Other concerns included: construction impacts (2 responses), and environmental impacts (1 response). Among the 49 respondents, 11 respondents (22.4 percent) indicated they had no major concerns.

Major Concerns about Floodwall or Levee	Number of Responses	% of Total Respondents
Appearance	20	40.8%
Type of Construction	20	40.8%
Impact on Activities Around Business	19	38.8%
Safety During Floods	15	30.6%
Impact on Property Value	14	28.6%
Distance from Business	13	26.5%
Visibility from Business	12	24.5%
No Concerns	11	22.4%
Other Concerns	3	6.1%

Flooding Solution Preferences (Question 15)

When asked to choose possible solutions to the local flooding problems, in general, respondents agreed that some measure of flood protection was necessary, although responses were dispersed among the six options given. Of the 49 respondents, 15 respondents said "do not know," "no flooding problem exists" or they did not feel any of the options given were satisfactory, but did not indicate another option.

Preferences for Permanent Flood Problem Solutions	Number of Responses	% of Total Respondents
Channel Modifications to Reduce Flood Levels	17	34.7%
Permanent New Floodwalls & Levees	16	32.7%
Relocating Most-Frequently Flooded Structures	11	22.4%
Raise and/or Floodproofing Most-Frequently Flooded Structures	7	14.3%
No Opinion	6	12.2%
Flood Insurance & Floodplain Zoning	4	8.2%
Present City Levees, Combined with Emergency Flood Fighting & Flood Forecasting	4	8.2%
Other		
- Need More Information	2	4.1%
- Clean Creeks and River	1	2.0%
- Levee (not Floodwall)	1	2.0%
- Manage the Rest of the Watershed Better	1	2.0%

Of the other responses, most considered channel modification to be a good solution to the local flood problems. Respondents were allowed to "check all that apply," thus the total number of responses (79) exceeds the number of respondents (49). Other options presented by respondents included using levees to protect, but not floodwalls; cleaning creeks and rivers; and managing the rest of the watershed better.

Conclusions

Among nonresidential respondents in the structural alternative area, most reported the location has special qualities. Respondents feel a good location; good accessibility, visibility and high traffic volumes; and convenience keep their businesses going. Finding a suitable location to maintain the same high visibility and accessibility may prove difficult given that over 90 percent of respondents want to remain in the same community or neighborhood. The Corps should evaluate the need for providing Community Development Sites should suitable relocation sites prove unavailable. It is important to mention that nonresidential structure owners will be more concerned with the location of a development site than residential structure owners due to the importance of location in operating a successful business.

Overall concern regarding flooding was low. However, respondents who indicated the most concern have occupied their structures for less than ten years. It is possible that other very concerned owner/operators have already sought safer locations since the 1977 flood.

In terms of a potential floodwall or levee, respondents were most concerned about the physical attributes of a floodwall or levee and less concerned with safety during a flood. This indicates that respondents may view a floodwall as a liability rather than an asset for the community. Channel modification is the preferred measure of flood protection among respondents.

Participation Rate

Raise-in-Place Participation (Question 16A)

When asked about their desire to participate in a raise-in-place floodproofing alternative for their structure, 67.3 percent indicated interest in participating. The overall structural raise-in-place participation rate is 62.0 percent.

Acquisition Participation (Question 16B)

By comparison, when given the second option of being acquired by the Government, slightly more respondents were willing to participate. Acquisition interested 69.4 percent of respondents. The overall structural acquisition participation rate is 60.2 percent.

Over one-fourth of respondents (28.6 percent) indicated they would not participate in either floodproofing program, and half of all respondents reported interest in participating in either program.

Conclusions

Participation rates are difficult to determine accurately due to the number of influences which contribute to this kind of decision. In

addition, a respondent may change their mind once, if not several times, after gathering all pertinent information and further evaluating options. Participation rates may also vary due to community cohesion – if a group of residents are willing to participate, this may influence others who are undecided to participate as well. In downtown Prestonsburg, ringwall floodproofing may only be available if a group of structures agrees to this method, thus community cohesion may be a dominant factor in whether this type of floodproofing would be successful. The information gathered during the personal interviews may vary from final participation rates, but it does provide a benchmark and indicates willingness to participate in the nonstructural program.

Answers by respondents being protected by a structural alternative may seem less informative given they could have neither raise-in-place nor acquisition as an option. On the other hand, if residents do not desire the protection of a structural alternative, the above participation rates are more useful.

RESIDENTIAL SURVEYS

Resident and Family

Age of Respondent (Question 2)

When asked to identify the appropriate age cohort that contained their age, responses varied from 25-29 years to over 80 years of age. The survey respondents can be categorized as older than the county's population as a whole. The median age among respondents was approximately between 50 and 54 years of age, while the median age for Floyd County as presented in the socio-economic data is 36.7 years of age. Floyd County's median age is similar to adjacent counties and the Commonwealth of Kentucky.

Number of Persons per Household (Question 3)

The number of persons per household among survey respondents is lower than that of the county and Commonwealth in 2000. The average number of persons per household among the residential structural survey respondents is 2.25 persons. By comparison, the average for Floyd County and Kentucky was 2.45 and 2.47 persons, respectively. Given the median age of respondents, it is not surprising that the study area also has a smaller household size because older populations often live alone or with their spouse, but typically do not have children or other extended family living with them.

Marital Status (Question 4)

Of the 63 respondents, one person refused to answer this question. Of the 62 respondents who did answer, a majority reported their marital status as married (58.1 percent). Fewer respondents reported their marital status as divorced (19.4 percent), widowed (16.1 percent), or single (6.5 percent).

Educational Attainment (Question 5)

Of the 63 respondents, one person refused to answer this question. In general, respondents were more highly educated than Floyd County and the Commonwealth as a whole. A total of 81.0 percent have obtained a high school diploma or higher and 33.3 percent have completed four or more years of college. By comparison, in 2000, 61.3 percent of Floyd County residents had completed high school and 9.7 percent had completed four years of college or more. Kentucky's educational attainment in 2000 was higher than Floyd County's, but still lower than the study area.

Employment Status, Type of Work, Travel Distance and Commute Time (Questions 6, 7, 8A and 8B)

Again, one respondent refused to answer this question. Of the 62 respondents who did answer, exactly half indicated they were employed. Two respondents indicated their current occupational status was other (3.2 percent), although they did not provide an explanation. Twenty-three respondents are retired, five are disabled, and one is a homemaker. These three categories' combined total is 46.8 percent of respondents.

Of those individuals who indicated they were employed outside of the home (33 respondents), 39.4 percent work in service, 27.3 percent work in business, 18.2 percent work in industry, 9.1 percent work in education, and 6.1 percent hold government positions.

The average distance traveled to work is 6.0 miles. The average commute is 8.8 minutes.

Household Income (Question 9)

Respondents were given three categories to choose from when identifying their annual income to the interviewer: 1) less than $25,000, 2) between $25,000 and $50,000, or 3) greater than $50,000. Among survey respondents, 20 respondents refused to answer the question. Of the remaining 43 respondents, 41.9 percent earned less than $25,000 last year, 25.6 percent earned between $25,000 and $50,000 and the remaining 32.6 percent earned more than $50,000 last year. Income is evenly distributed among the three categories and the median annual income would fall in the $25,000 to $50,000 category. Median household income among all Floyd County households in 2000 was $21,168 and $33,672 for all Kentucky households.

Conclusions

Structural survey respondents are older and more educated compared to all Floyd County residents. One indicator of high community cohesion is the short travel distance and commute time as reported by the employed respondents. Living close to work indicates close ties to the community and may indicate that residents will be less likely to move. Another indicator of community cohesion is the age of residents. Elderly residents are often less likely to move, thus providing stability to a neighborhood or community.

Structures and Flooding

Post Office and Community (Questions 1A and 1B)

All respondents reported their home post office is in Prestonsburg. Fifty-one respondents indicated that they live in Prestonsburg, 11 said

they live in the Blackbottom neighborhood and one respondent indicated they reside on May Farm.

Type of Structure, Occupied Tenure, Ownership and Age of Structure (Questions 10, 11, 12 and 13)

Of the 63 respondents, a majority (79.4 percent) live in single-family homes, while 7.9 percent live in apartments, 6.3 percent live in mobile or manufactured homes, 4.8 percent live in a duplex, and 1.6 percent (one respondent) indicated they live in another type of structure.

The average age of the 63 structures is 47.9 years, with a range between 6.5 and 122 years. The average number of years respondents have lived in their current homes is 21.9 years. A total of 79.4 percent of structures are owner-occupied, and 20.6 percent are renter-occupied. Owner-occupancy is higher among survey respondents compared to the county. In 2000, 69.4 percent of Floyd County's housing units were owner-occupied.

Knowledge about Flooding, Flood Insurance, Number of Times Experienced Flooding and Experiences as a Result of Flooding (Question 16, 17, 19 and 20)

Question 16, 17, 19 and 20 are grouped together here because they all refer to flooding and its effects. Of the 63 interviewees, one respondent was unable to answer Question 16. Of the 62 who were able to answer, 36 answered in the affirmative - that they would have moved to the location even if they knew it could be flooded (58.1 percent) and many said they were aware of the possibility, but chose to move there despite the chance of flooding. Twenty-six respondents answered in the negative – that they would not have moved to the location if they had been aware of the possibility of flooding (41.9 percent). These response rates are similar when compared to the nonresidential structural surveys. Among all structural survey respondents that were able to answer this question (110 respondents), 59.1 percent would have moved to their current location even if they knew it could flood.

According to respondents, 22.6 percent currently pay for flood insurance. Eleven respondents (17.5 percent) indicated that they have experienced flooding while residing at their current location. Eight structures flooded once (12.3 percent), two respondents reported flooding twice (3.2 percent), and one respondent reported flooding three times during their occupancy of the building (1.6 percent). Approximately one-third of respondents who have occupied their location for 30 or more years reported experiencing flooding.

Of those 52 respondents who never experienced flooding, only one reported experiencing any of the negative events as a result of

flooding. This respondent reported that their children missed school as a result of flooding – the children attended school outside of Prestonsburg in Floyd County. In this case, flood waters may have flooded the school or cut off normal routes to school, thus making it impossible to attend.

Of the 11 respondents who experienced flooding, 36.4 percent experienced flood damages, 18.2 percent experienced lost work days and wages, 9.1 percent experienced dislocation from work, 9.1 percent experienced children missing school days, and none had medical expenses related to flooding.

Conclusions

Length of structure occupancy and owner-occupancy are both indicators of community cohesion. Among the residential structures surveyed, the average term of occupancy was 21.9 years. By comparison, the national average for occupied housing units was approximately six years as reported in the 2001 American Housing Survey (in 2001, the median year householder moved into unit was 1995.) The area's high average length of occupancy indicates a high level of community cohesion. The average for the survey area is much higher than the national average, mainly because over one-third of residents have lived there more than 30 years. Overall, longer terms of residence tend to increase community cohesion.

The owner-occupancy rate for the area is also much higher than the county rate indicating high community cohesion for the area. The owner-occupancy rate is a good indicator of community cohesion because homeowners are less likely than renters to move since they have a financial commitment tied to that location. A community with high homeowner-occupancy is generally assumed to be stable, and a place where residents have a personal connection to neighbors and the neighborhood.

Feelings and Concerns about the Community and Flooding

Number of Visits to Friends/Family per Week (Question 14)

The number of visits to friends and family per week is a primary indicator of community cohesion. When asked how many times they visited with friends and family in the area, responses varied from 0 to 7 visits, with an average of 3.7 visits per week. Several respondents provided a range to the Contractor; in these cases, the average of the range was used. For example, if the respondent indicated they visit friends and family 2 to 3 times per week, an average of 2.5 visits per week was used.

When data is broken down by correlating the number of years of residence in the current home compared to the number of visits made each week, residents that have lived there between 20 and 29 years visit friends and family more often, on average, than other groups.

Reside at Current Location	Total Number of Visits	Average Visits per Week
0 - 9 years	63	3.5
10 - 19 years	46	2.7
20 -29 years	27.5	4.6
30 + years	84	3.8

When data is broken down by correlating age and the number of visits made each week, residents 65 years of age and over visit friends and family less often. When comparing employment status and the number of visits made each week, employed persons were found to visit friends and family more often.

Characteristic	Total Number of Visits	Average Visits per Week
25 - 44 years	62	3.9
45 - 64 years	88.5	3.4
65 + years	61.5	3.2
Employed/Self-Employed	113.3	3.7
Retired	77	3.3

Special Characteristics of the Neighborhood (Question 15)

When asked if there were characteristics about the neighborhood that were special to them, 13 respondents (20.6 percent) answered that there was nothing special about the neighborhood. The responses from those who feel the neighborhood has special characteristics (50 respondents) were relatively consistent. Responses were grouped into the following categories:

Special Characteristics	Number of Responses	% of Total Responses
Quiet, Peaceful	22	34.9%
Good Location	15	23.8%
Safety	15	23.8%
Convenient	14	22.2%
Nothing	13	20.6%
Family, Neighbors	12	19.0%
My Home, Heritage	4	6.3%
Historical Home	4	6.3%
Nice, Pretty, Special	4	6.3%
River	4	6.3%
Private, Exclusive	2	3.2%
First Floor Access	1	1.6%
No Traffic	1	1.6%

This open-ended question allowed respondents to explain, in their own words, why they like their neighborhood and what characteristics they feel are special. Good location and convenience were mentioned frequently among both the residential and nonresidential structural survey responses.

Concern about Flooding (Question 18)

Of the 63 respondents, 9.5 percent were very concerned about future flooding, 25.4 percent were somewhat concerned, and 65.1 percent were not at all concerned about flooding. Concerns about flooding are consistent with other responses given that few respondents have experienced flooding over an average residence of almost 22 years per respondent.

Feelings and Major Concerns about Acquisition (Question 21 and 24)

With little history of flooding problems among respondents and concern about future flooding, a majority of respondents (60.3 percent) either oppose or strongly oppose their home being acquired in order to construct a larger flood protection project that would protect part or all of the community. Seven respondents (11.1 percent) had no opinion about being acquired as part of a larger flood protection project, and 28.6 percent either support or strongly support being acquired.

When asked about their biggest concerns if their home and property were to be acquired, a majority of respondents identified at least one major concern and many identified more than one. Identifying more than one major concern indicates respondents' overall concern regarding acquisition is high. The most frequently raised concern was "getting a fair price for your home and moving expenses."

Major Concerns about Acquisition	Number of Responses	% of Total Respondents
Fair Price and Moving Expenses	44	69.8%
Locating Suitable House/Apt.	42	66.7%
Finding a Good Neighborhood	41	65.1%
Cost of Purchasing/Financing	20	31.7%
Maintaining Old Friendships	18	28.6%
Finding Good Schools	12	19.0%
Other		
- Moving (Does Not Want To)	6	9.5%
- Finding Comparable House	1	1.6%
- Corps Paying Value of House	1	1.6%
- Utility Setup	1	1.6%
- Losing Longtime Family Home	1	1.6%
No Concerns	1	1.6%

Other concerns include: moving to a new location (6 responses), finding comparable housing in Prestonsburg (1 response), the Government paying the value of the house (1 response), the cost of utility setup (1 response) and losing a longtime family home (1 response).

Moving Preferences (Question 22)

Of the 63 respondents, six respondents were unable to answer this question or stated they did not know. Of the 57 respondents who did answer Question 22, 80.7 percent prefer to stay within the neighborhood or community if they were required to relocate. Three respondents would prefer to relocate to another part of Floyd County (5.3 percent), five respondents would prefer to relocate outside of the county, but within the Commonwealth of Kentucky (8.8 percent), and five respondents would prefer to move outside of the state (5.3 percent).

Major Concerns about Floodwall or Levee (Question 23)

When asked about major concerns about a new levee or floodwall being built near their home, as a group, respondents indicated that its appearance was their largest concern (73.0 percent). Of the 63 residential survey respondents, one was unable to answer this question. The remaining respondents were allowed to "check all that apply," thus the total number of responses (226) exceeds the number of respondents (62).

Other concerns included: flooding of West Prestonsburg, impacts on property usage, destroying a family home, impacting the aesthetic value of Arnold Avenue and building an unnecessary floodwall (an individual who indicated they never experience flooding). Among the 62 respondents, 59 identified at least one major concern.

Major Concerns about Floodwall or Levee	Number of Responses	% of Total Respondents
Appearance	46	73.0%
Impact on Property Value	36	57.1%
Type of Construction	34	54.0%
Distance from Residence	28	44.4%
Safety During Floods	26	41.3%
Visibility from Residence	26	41.3%
Impact on Activities Around Home	22	34.9%
Other Concerns	5	7.9%
No Concerns	3	4.8%
No Response	1	1.6%

Flooding Solution Preferences (Question 26)

When asked to choose possible solutions to the local flooding problems, as a whole, respondents agreed that some measure of flood protection was necessary, although responses were dispersed among the options provided. Among the respondents, a majority considered channel medications to reduce flood levels to be a good solution to the local flood problems. Respondents were allowed to "check all that apply," thus the total number of responses (100) exceeds the number of respondents (63). Several other options were presented by residents, including doing nothing, because they felt flooding was not a problem. Of the 63 respondents, eight respondents had no opinion or preference about permanent flood problem solutions.

Preferences for Permanent Flood Problem Solutions	Number of Responses	% of Total Respondents
Channel Modifications to Reduce Flood Levels	31	49.2%
Permanent New Floodwalls & Levees	23	36.5%
Raise and/or Floodproofing Most-Frequently Flooded Structures	12	19.0%
Relocating Most-Frequently Flooded Structures	11	17.5%
No Opinion	8	12.7%
Present City Levees, Combined with Emergency Flood Fighting & Flood Forecasting	3	4.8%
Flood Insurance & Floodplain Zoning	2	3.2%
Other		
- Flooding is Not a Problem	5	7.9%
- Another Reservoir or Dam	1	1.6%
- Clean River Banks	1	1.6%
- Control Existing Reservoirs	1	1.6%
- Raise Roadways to Act as Levee	1	1.6%
- Wise Environmental Regulation and Management	1	1.6%

Conclusions

The number of visits to friends and family per week is a primary indicator of community cohesion. The more connected residents are within the community, measured by the number of visits to friends and family during the week, the more likely they to remain in the area. An emotional connection to friends and family in the area can also transcend to neighbors; approximately one-fifth of respondents indicated that family and neighbors make their neighborhood special.

When asked what major concerns they had about Government acquisition, 28.6 percent of respondents considered maintaining old friendships a major concern. Residents were much more concerned

about getting a fair price for their home and moving expenses, locating a suitable new home, and finding a good neighborhood to move to.
Overall, residents were not very concerned about flooding and based upon past experience, few have had flooding problems.

Approximately 85 percent of respondents would prefer to stay within their own community/neighborhood or within Floyd County if they were required to relocate due to acquisition. This high percentage indicates that a very high level of community cohesion currently exists. Residents want to stay in the area because of the many special neighborhood characteristics they noted in Question 15, specifically peacefulness, location, safety, convenience, family, and neighbors. Residents are also concerned that if their homes are acquired, they may have difficulty finding another suitable neighborhood. For the reasons mentioned above, the Corps should evaluate the need for providing Community Development Sites should suitable relocation sites prove unavailable.

Participation Rate

Raise-in-Place Participation (Question 25A)

When asked about their desire to participate in a raise-in-place floodproofing alternative for their home, four residents were unable to answer this question. Of the remaining 59 respondents, 57.6 percent indicated interest in participating in a raise-in-place floodproofing program. The overall structural raise-in-place participation rate is 62.0 percent.

When data is broken down by age groups, residents 25 – 44 years of age (81.3 percent participation rate) were much more likely than residents 44 – 65 years of age (50.0 percent) or residents 65 years and older (42.1 percent) to indicate interest in the raise-in-place program. When data is broken down by income levels, residents who earn less than $25,000 were most likely to indicate interest in participating (61.1 percent). By comparison, 54.6 percent of residents earning between $25,000 and $50,000 said they would participate and 50.0 percent of residents earning greater than $50,000 indicated interest in participating.

Acquisition Participation (Question 25B)

By comparison, when given the second option of being acquired by the Government, 52.5 percent of respondents were willing to participate. Again, four respondents were unable to answer this question; therefore, the percentage presented above is based on 59 responses. The overall structural acquisition participation rate is 60.2 percent.

Again, when data is broken down by age groups, residents 25 – 44 years of age (56.3 percent participation rate) were slightly more likely than residents 44 – 65 years of age (53.9 percent) or residents 65 years and older (36.8 percent) to indicate interest in the raise-in-place program. When data is broken down by income levels, residents who earn between $25,000 and $25,000 were more likely to indicate interest in participating in the acquisition program (72.7 percent). By comparison, 44.4 percent of residents earning less than $25,000 said they would participate and 42.9 percent of residents earning greater than $50,000 indicated interest in participating.

Approximately one-fourth of respondents indicated they would not participate in either program, while 61.2 percent would participate in either the raise-in-place or acquisition program.

Conclusions

As discussed earlier, participation rates are difficult to determine accurately due to the number of influences which contribute to this kind of decision. Respondents may change their mind once, if not several times, after gathering all pertinent information and further evaluating options. Participation rates also may vary due to community cohesion – if a group of residents is willing to participate, this may influence others who are undecided to participate as well. The information gathered during the personal interviews may vary from final participation rates, but it does provide a benchmark and indicates willingness to participate in the nonstructural program.

Answers by respondents being protected by a structural alternative, as is the case here, may seem less informative given they could have neither raise-in-place nor acquisition as an option. On the other hand, if residents do not desire the protection of a structural alternative, the above participation rates will become more useful.

Overall Structural Area Existing Community Cohesion

As discussed earlier, the measurement of community cohesion is relatively difficult to determine and not always precise due to difficulties in measuring opinions and preferences. The following will provide information about the nonstructural area's overall existing community cohesion.

Term of Occupancy

The average term of occupancy for residential survey respondents is 21.9 years and the average term for nonresidential survey respondents is 18.2 years. All nonstructural survey respondents have occupied their structure for an average of 20.3 years. Longer terms of occupancy tend to increase community cohesion because neighborhoods and commercial areas are more stable. The high average term of occupancy among nonstructural survey respondents indicates a high level of community cohesion.

Frequency of Visits

The average number of visits to friends and family per week confirms a moderate level of community cohesion. Residential survey respondents reported visiting 3.7 times per week, which equates to visiting approximately every other day. The more connections and contacts residents have in an area, the more likely they are to remain even if required to relocate. They may also have some effect on participation in floodproofing programs.

Number of Families with Children

The survey questionnaire does not specifically ask the number of children per household, although respondents were asked their age and number of residents in the household. Using the information gathered by the survey, several assumptions were made to estimate the percent of families with children within the survey area. First, it was assumed respondents over the age of 55 years do not have children still living at home even if their household size is greater than two persons. Second, it was assumed respondents younger than 55 years of age with households greater than two persons do have children living at home. Third, it was assumed that all households are family households. Based upon these assumptions, it is estimated that among structural survey respondents 31.7 percent of households were families with children present. Compared to year 2000 Census data, 33.0 percent of all households in Floyd County were families with children under 18 years of age, 32.5 percent of all households in Kentucky were families with children, and 32.8 percent of all households in the United States were families with children present.

The presence of children in the household typically promotes community cohesion through the involvement of parents in school activities, church and community groups. Community cohesion as measured under this criterion appears to be moderate.

Rate of Owner-Occupancy

The majority of respondents currently own the structure where they reside or operate their business. Owner-occupancy among the nonresidential respondents is 67.3 percent and among the residential respondents it was even higher at a rate of 79.4 percent. Ownership typically indicates that residents and owner/operators are engaged in their community and value the area enough to purchase property. This connection to the area also confirms a high level of community cohesion.

Employment Status

Employment status is important in considering community cohesion because community ties are typically stronger when a person is employed in the area. The workplace can be a place of socializing as well as lead to other social activities. Retirees also tend to socialize more with other retirees and often with other retirees of the same industry or employer because they have common bonds. Survey results show that 95.2 percent of respondents are employed, retired, or disabled. Among respondents, none were unemployed compared to 4.2 percent of Floyd County's population over the age of 16 in 2000. The unemployment rate among respondents is also zero, compared to the county's year 2000 unemployment rate of 10.0 percent, and adjacent counties' average unemployment rate of 10.4 percent.

Respondents also reported traveling an average of 8.8 minutes to work (and an average 6.0 miles to work) compared to a median commute time of 25.8 minutes for all Floyd County residents in 2000. Consideration of the employment criterion indicates a high level of community cohesion.

Relocation Preference

If required to relocate, 86.0 percent of residential survey respondents indicated they would prefer to stay in their current community/neighborhood or within Floyd County. Nonresidential survey respondents were also interested in staying in their current community/neighborhood or within Floyd County (97.8 percent). These high rates indicate a very high level of community cohesion for the residential neighborhoods as well as the nonresidential area, specifically, downtown Prestonsburg. Residents and owner/operators want to stay close to friends and family, whom they visit frequently, want to maintain schools for their children, want to remain in a safe and peaceful neighborhood, and want to maintain their businesses.

Special Characteristics of the Neighborhood

Several of the nonstructural survey respondents listed special characteristics of the neighborhood that imply a significant level of community cohesion. The following percentages are for all structural respondents. A total of 19.2 percent of respondents indicated people (friends, family or customers) made the neighborhood or location special, and 12.8 percent of respondents indicated that their home, building or heritage was special. In addition, maintaining relationships if acquisition by the Government were required was a major concern for 38.7 percent of respondents. Although not the most frequently cited special characteristic or concern about acquisition, it is apparent that connections, contacts, stability, heritage, and a sense of community currently exist and these are elements that are important for respondents.

Overall community cohesion of the structural survey area is high. This area is considered the central business district of Prestonsburg, the county seat of Floyd County. In addition, the residential area to the north of downtown Prestonsburg has exhibited its community cohesiveness by building a coalition against a possible floodwall along the banks of the Levisa Fork River. This summary is applicable as the community cohesion of Zones A and B.

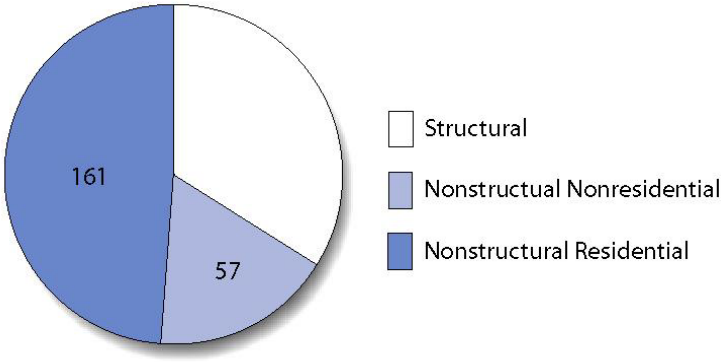
Nonstructural Area Survey Results and Community Cohesion

INTRODUCTION

A majority of structures eligible for the Section 202 Program are located outside of the more densely populated Prestonsburg area; as a result, they would not be in the area where structural flood protection alternatives are currently being investigated. The Corps developed a list of 741 structures in Zones C, D, E and F. These four zones combine to make up the nonstructural area where approximately 20 percent of structures were to be surveyed. Structures within the nonstructural areas of DPR 1 may be eligible for floodproofing measures or acquisition on a voluntary basis. Appropriate nonstructural measures would be selected by the Corps based upon cost effectiveness. Of the 741 structures, 218 respondents completed the personal interview questionnaire (29.4 percent).

Of the 218 questionnaires completed, nonresidential responses accounted for 26.1 percent (57 responses) and residential responses accounted for 73.9 percent (161 responses).

Nonstructural nonresidential survey results will be presented first, followed by the nonstructural residential survey results. The format in which the survey results and conclusions are discussed is as follows: 1) resident and family (except nonstructural nonresidential section), 2) structures and flooding, 3) feelings and concerns about the community and flooding, and 4) participation rate. Overall existing community cohesion for the nonstructural area will be discussed at the end of this section.



NONRESIDENTIAL SURVEYS

Structures and Flooding

Post Office and Community (Questions 1A and 1B)

Of the 57 respondents to the nonstructural nonresidential survey, two respondents did not answer this question. Of the 55 respondents who did answer, 83.6 percent received mail through the Prestonsburg post office, while 14.5 percent received mail through Auxier and the remaining 1.8 percent received mail through the Lexington post office. Owner/operators live in several communities and neighborhoods across Floyd County. However, almost 20 percent of respondents did not respond when asked what community or neighborhood they live in.

Respondent's Residence	Number of Responses	% of Total Responses
Auxier	8	14.0%
Gable Roberts	2	3.5%
Lexington	1	1.8%
Prestonsburg	35	61.4%
No Response	11	19.3%

Occupied Tenure, Ownership and Age of Structure (Questions 2, 3 and 4)

The average length of time each respondent has occupied their structure is 14.0 years. Four of the 57 owner/operators (7.4 percent) indicated they have occupied their location for more than 30 years. Although, 24 respondents indicated their tenure was less than ten years (44.4 percent).

Nonresidential structures eligible for the nonstructural program were more likely to be owner-occupied (68.4 percent) than renter-occupied (31.6 percent). This represents a high rate of owner-occupancy that is similar to nonresidential structural survey respondents.

Of the 57 respondents, five were unable to report the approximate age of their structure and one response was unquantifiable (“new”). Of the 51 responses, structures age varied from 1.5 years to 60 years, with an average of 23.7 years. Sixteen structures were 30 years old or older, fourteen structures were between 20 and 29 years old, eleven structures were between 10 and 19 years old, and ten structures were less than ten years old. A majority of surveyed nonresidential structures have been built since the 1977 flood.

Knowledge about Flooding, Flood Insurance, Number of Times Experienced Flooding and Experiences as a Result of Flooding (Question 6, 7, 9 and 10)

Question 6, 7, 9 and 10 are grouped together here because they all refer to flooding and its effects. One respondent was unable to answer Question 6. Of the 56 respondents who did respond, 14 answered in the affirmative - that they would have moved to the location even if they knew it could be flooded (25.0 percent) and many said they were aware of the possibility, but chose to locate there despite the chance of flooding. Forty-two respondents answered in the negative – that they would not have moved to the location if they had been aware of the possibility of flooding (75.0 percent). When asked whether they currently pay for flood insurance, 27.1 percent of the respondents indicated they do currently pay.

A majority of respondents (78.9 percent) indicated they had never experienced flooding while occupying their location. Several structures flooded once (15.8 percent), two reported flooding twice (3.5 percent), and one reported flooding three times during their occupation of the building (1.8 percent).

Of those 45 respondents who never experienced flooding, five reported experiencing negative events as a result of flooding. These respondents reported that employees missed work as a result of flooding – the flooding impacted employees being able to get to work, however, it did not affect the structure itself.

Of the 12 respondents who experienced flooding, 83.3 percent experienced flood damage, 41.2 percent experienced employees missing work, 25.0 percent experienced dislocation from work, 25.0 percent experienced lost work days and wages, and none reported medical expenses related to flooding.

Conclusions

Term of structure occupancy and owner-occupancy are indicators of community cohesion. Term of occupancy, on average, was high even though few of the respondents indicated occupying their structure for more 30 years. In addition, owner-occupancy was high and consistent with nonresidential structural survey respondents.

While the two statistics above indicate a moderate to high level of community cohesion, the fact that the surveyed nonresidential structures are geographically dispersed throughout the DPR 1 area may indicate that a high level of community cohesion is unlikely. Typically a central business district or commercial district physically links business owners together to establish community cohesion, although, if structures are geographically dispersed, no cluster or

district is created. Small clusters of nonresidential structures may experience some degree of weakened community cohesion.

Feelings and Concerns about the Community and Flooding

Special Characteristics of the Neighborhood (Question 5)

When asked if there were characteristics about the neighborhood that were special to them, 41 respondents (71.9 percent) answered that there was nothing special about the neighborhood. The responses from those who feel the neighborhood has special characteristics (16 respondents) were relatively consistent. Responses were grouped into the following categories:

Special Characteristics	Number of Responses	% of Total Responses
Good Location	9	56.3%
Good Access, Visibility, High Traffic Volume	3	18.8%
Affordable	1	6.3%
Building	1	6.3%
Community	1	6.3%
Convenient	1	6.3%
Well-Established	1	6.3%

This open-ended question allowed respondents to explain, in their own words, why they like their neighborhood and what characteristics they feel are special. Good location; and good access, visibility, and high traffic volume were mentioned most frequently. These responses were also mentioned by nonresidential structural survey respondents frequently.

Concern about Flooding (Question 8)

Of the 57 respondents, 17.5 percent were very concerned about future flooding, 21.1 percent were somewhat concerned and the remaining 61.4 percent were not at all concerned about flooding. While almost 40 percent of respondents expressed some concern, a majority of respondents were not at all concerned about future flooding. The lack of concern by a significant percentage of respondents may be attributed to the almost 30-year gap between the survey and the 1977 flood.

Moving Preferences (Question 12)

When asked about relocation preferences, one respondent was undecided about where they would move if required to relocate. Of the remaining 56 respondents, 89.3 percent prefer to stay within the neighborhood or community if they were required to relocate. Several owner/occupants expressed concern that, while they prefer to

stay in the community or neighborhood for various reasons, the lack of available, suitable land within the community and the county was a concern. Three respondents would prefer to relocate to another part of Floyd County (5.4 percent), one respondent indicated they would prefer to relocate to another county within the Commonwealth of Kentucky (1.8 percent), and two respondents indicated they would close their business if required to relocate (3.6 percent). No respondents indicated interest in moving outside of the state.

Major Concerns about Acquisition (Question 13)

When asked about their biggest concerns if their structure and property were to be acquired by the Government, all but one respondent identified at least one concern. Many respondents identified more than one concern about acquisition and 30.4 percent said all of the listed responses were major concerns for them. Identifying more than one major concern indicates respondents' overall concern regarding acquisition is high. The most frequent response was "finding a good location to move to." Almost 80 percent of respondents were concerned about this relocation issue. Two respondents indicated concern about access to a water source such as a river or lake.

Major Concerns about Acquisition	Number of Responses	% of Total Respondents
Finding a Good Location to Move to	45	78.9%
Locating Suitable Building	35	61.4%
Fair Price and Moving Expenses	33	57.9%
Maintaining Business Relationships and/or Customer Base	28	49.1%
Cost of Re-establishing Business at a New Location	24	42.1%
Other Concerns	2	3.5%
No Concerns	1	1.8%

Conclusions

Respondents felt good accessibility, visibility, high traffic volumes, and good location keep their businesses going. Finding a good location to maintain the same high visibility and accessibility may prove difficult given that approximately 90 percent of respondents want to remain in the same community or neighborhood. In addition, over 90 percent of nonresidential structural survey responses would also prefer to relocate within the same neighborhood or community, which could create higher demand for suitable and affordable locations for nonresidential structures. As mentioned earlier, it is likely that nonresidential structure owners will be more concerned with the location of a new development site than residential structure owners due to the importance of location in operating a successful business. While finding a good location was the biggest concern, almost half of all respondents were also concerned about maintaining their current

business relationships or customer base. The Corps should evaluate the need for providing Community Development Sites should suitable relocation sites prove unavailable.

A high level of interest in remaining in the neighborhood or community and concern about maintaining relationships indicates a high level of community cohesion for survey respondents, although, respondents sent a mixed message because a majority said their current location has no special qualities.

Participation Rate

Raise-in-Place Participation (Question 11A)

When asked about their desire to participate in a raise-in-place floodproofing alternative for their structure, 87.7 percent indicated interest in participating. The overall nonstructural raise-in-place participation rate is 77.1 percent.

Acquisition Participation (Question 11B)

By comparison, when given an alternate option of being acquired by the Government, fewer respondents were willing to participate. Acquisition interested 75.4 percent of respondents. The overall nonstructural acquisition participation rate is 67.4 percent.

Approximately ten percent of respondents indicated they would not participate in either program and 73.7 percent indicated interest in participating in either the raise-in-place or the acquisition program.

Conclusions

Participation rates are difficult to determine accurately due to the number of influences which contribute to this kind of decision. In addition, a respondent may change their mind once, if not several times, after gathering all pertinent information and further evaluating options. Participation rates may also vary due to community cohesion – if a group of residents is willing to participate, this may influence others who are undecided to participate as well. The information gathered during the personal interviews may vary from final participation rates, but it does provide a benchmark and indicates willingness to participate in the nonstructural program.

In general, respondents were much more interested in participating in an acquisition program than a floodproofing program. If alternative development sites were not available in the same community, acquisition participation rates may vary.

RESIDENTIAL SURVEYS

Resident and Family

Age of Respondent (Question 2)

When asked to identify the appropriate age cohort that contained their age, responses varied from 20-24 years to over 80 years of age. The survey respondents can be categorized as older than the county's population as a whole. The median age among respondents was within the 55-59 year age group, while the median age for Floyd County as presented in the socio-economic data is 36.7 years of age. Floyd County's median age is similar to adjacent counties and the Commonwealth. Three respondents refused to answer this question; therefore, 158 total responses are presented below.

Respondent's Age Group	Number of Responses	% of Total Responses
20-24 years	5	3.2%
25-29 years	12	7.6%
30-34 years	13	8.2%
35-39 years	15	9.5%
40-44 years	3	1.9%
45-49 years	11	7.0%
50-54 years	12	7.6%
55-59 years	13	8.2%
60-64 years	23	14.6%
65-69 years	14	8.9%
70-74 years	16	10.1%
75-79 years	8	5.1%
80 + years	13	8.2%

Number of Persons per Household (Question 3)

The number of persons per household among survey respondents is slightly lower than that of the county and Commonwealth in 2000. The average number of persons per household among the residential nonstructural survey respondents is 2.32 persons. By comparison, the average for Floyd County and Kentucky was 2.45 and 2.47 persons, respectively. Three respondents refused to answer this question; therefore, the average household size is based on 158 responses.

Marital Status (Question 4)

Of the 161 total respondents, two refused to answer this question. A majority of survey respondents reported their marital status as married (66.0 percent). Of the remaining respondents, 17.0 percent reported being widowed, 11.9 percent reported being divorced, and 5.0 percent indicated they were single.

Educational Attainment (Question 5)

Of the 161 respondents, one individual refused to respond or did not provide a response when asked about educational attainment. A total of 68.9 percent have obtained a high school diploma or higher and 12.4 percent have completed four or more years of college. Educational attainment of survey respondents is slightly higher compared to all Floyd County residents. In 2000, 61.3 percent of county residents had at least completed high school and 9.7 percent had completed four years of college or more. Educational attainment among survey respondents was lower compared to Kentucky. In 2000, 74.1 percent of Kentucky residents had at least completed high school and 17.1 percent had completed four years of college or more.

Employment Status, Type of Work, Travel Distance and Commute Time (Questions 6, 7, 9 and 10)

Of the 161 respondents, three respondents refused to answer this question. Of the remaining 158 respondents, 61 are retired, 13 are disabled, 6 are homemakers and two are students. These four categories' combined are considered not part of the labor force; their total is 51.9 percent of respondents (82 responses). Employed persons represent 39.2 percent of responses and 8.9 percent were temporarily unemployed. These two categories together are considered the labor force (48.1 percent) – persons who are employed or are actively seeking employment.

Of the 62 respondents who are currently employed, 67.7 percent work in the service industry, 17.7 percent work in industry (such as manufacturing or mining), 6.5 percent work in the business field, 6.5 percent work in education, and 1.6 percent work for the government. Employment in varied fields indicates a diverse community.

The average distance traveled to work is 12.6 miles. This average distance is about twice the travel distance of structural survey respondents (6.0 miles). All responses varied from 0 miles (work at home) to 125 miles (travels to Lexington every day). Six respondents did not answer this question and five respondents provided unquantifiable responses, such as "varies."

The average commute to work is 18.1 minutes, compared to 8.8 minutes for structural survey respondents. All responses varied from 0 minutes (work at home) to 120 minutes. Four respondents did not answer this question and five respondents provided unquantifiable responses, such as "varies."

Household Income (Question 9)

Respondents were given three categories to choose from when identifying their annual income to the interviewer: 1) less than $25,000, 2) between $25,000 and $50,000, or 3) greater than

$50,000. Among nonstructural survey respondents, 55 people refused to answer the question. Of the remaining 106 respondents, 49.1 percent earned less than $25,000 last year, 27.4 percent earned between $25,000 and $50,000 and the remaining 23.6 percent earned more than $50,000 last year. When the three income categories are compared, almost half of respondents earn less than $25,000 per year. This is consistent with the median household income among all Floyd County residents in 2000 ($21,168). The data shows that the median annual income of respondents would fall in the $25,000 to $50,000 category, similar to the structural survey respondents.

Conclusions

The nonstructural residential survey respondents are older and more educated compared to all Floyd County residents. One indicator of community cohesion is the age of residents. Older residents are often less likely to move, thus providing stability to a neighborhood or community. One indicator of high community cohesion is short travel distance and commute time. For less densely populated areas, such as this, living within 20 miles or 20 minutes of work indicates close ties to the community and may indicate that residents will be less likely to move.

Structures and Flooding

Post Office and Community (Questions 1A and 1B)

Of the 161 respondents to the nonstructural residential survey, seven respondents did not indicate their post office and twelve respondents did not indicate the community or neighborhood in which they live. A majority of respondents receive their mail through the Prestonsburg post office (83.8 percent). Respondents also receive mail at other post offices, including Auxier (12.3 percent), East Point (1.3 percent), and Phelps (0.6 percent). Residents live in several communities and neighborhoods across Floyd County.

Respondent's Residence	Number of Responses	% of Total Responses
Auxier	19	11.8%
Cliffside	2	1.2%
East Point	5	3.1%
Gable Roberts	18	11.2%
Prestonsburg	105	65.2%
No Response	12	7.5%

Type of Structure, Occupied Tenure, Ownership and Age of Structure (Questions 10, 11, 12 and 13)

A majority of respondents live in single-family homes (74.5 percent), while 13.0 percent live in a mobile or manufactured home, 8.7 percent live in an apartment and 1.9 percent live in a duplex. Three other respondents indicated that they live in some other type of structure (1.9 percent).

A total of 77.0 percent of structures were owner-occupied. Owner-occupancy was higher among survey respondents compared to the county. In 2000, 69.4 percent of Floyd County's housing units were owner-occupied. Other housing units were renter-occupied (22.4 percent) or respondents indicated that they have some other type of ownership arrangement (0.6 percent), such as owning the structure, but leasing the land.

Of the 161 respondents, 11 were unable to provide an approximate age for their structure. Of the 150 respondents who were able to answer, structure age varied from 0 years to 100 years, with an average age of 32.3 years. A majority of structures were over 30 years of age (54.0 percent), 26.0 percent were 20-29 years old, 11.3 percent were 10-19 years old and 8.7 percent were less than 10 years old.

The average number of years respondents have lived in their current homes is 15.9 years. Answers ranged from 0 years (respondent indicated that they do not currently live at the residence) to 77 years. The average term of occupancy and range represents answers from 156 respondents; four respondents were unwilling to answer this question and one provided an unquantifiable response.

Knowledge about Flooding, Flood Insurance, Number of Times Experienced Flooding, and Experiences as a Result of Flooding (Questions 16, 17, 19 and 20)

Question 16, 17, 19 and 20 are grouped together here because they all refer to flooding and its effects. Of the 161 interviews, two respondents were unable or unwilling to answer Question 16. Of the 159 who did respond, 75 answered in the affirmative - that they would have moved to the location even if they knew it could be flooded (47.2 percent) and many said they were aware of the possibility, but chose to move there despite the chance of flooding. By comparison, 83 respondents answered in the negative – that they would not have moved to the location if they had been aware of the possibility of flooding (52.2 percent). One respondent was undecided and thus answered "maybe" (0.6 percent). When compared to the residential structural survey respondents, a majority (58.1 percent) would have moved to their current location even if they knew it could flood, whereas a majority of residential nonstructural respondents

would not have moved to their current location even if they knew it could flood.

According to the 155 respondents who answered Question 17, 36.8 percent currently pay for flood insurance. Among all respondents that reported experiencing flooding, only a slightly higher percentage of residents currently pay for flood insurance (38.2 percent).

When asked about their flood experiences, a majority of respondents (78.9 percent) indicated that they have never experienced flooding while residing at their current location.

A total of 34 respondents that indicated they had experienced flooding during their occupancy of the building; 18 structures have flooded once (11.2 percent), nine structures have flooded twice (5.6 percent), three structures have flooded three times (1.9 percent), two structures have flooded four times (1.2 percent) one structure flooded five times (0.6 percent) and one structure flooded six times (0.6 percent). Among respondents, the average number of floods experienced is 0.4 per household. Of those respondents who have occupied their location for 30 or more years, 53.3 reported experiencing flooding between one and five times, with an average of 2.3 times per household.

Several respondents did not report experiencing flooding, although, they did experience some of the negative impacts associated with flooding. Among these respondents, in addition to those who did experience flooding, 50.0 percent experienced children missing school days, 48.6 percent experienced flood damage, 29.4 percent experienced dislocation from work, 28.6 percent experienced lost work days and wages, and none had medical expenses related to flooding.

Conclusions

Length of structure occupancy and owner-occupancy are both indicators of community cohesion. Among the residential structures surveyed, the average term of occupancy was 15.9 years. As mentioned earlier, the national average for occupied housing units was approximately six years as reported in the 2001 American Housing Survey (in 2001, the median year householder moved into unit was 1995.) Similar to the structural, residential survey respondents, the high average length of occupancy indicates a high level of community cohesion. Overall, longer terms of occupancy tend to increase community cohesion.

The owner-occupancy rate is also higher than the county rate, which indicates a high level of community cohesion for the area. The owner-occupancy rate is a good indicator of community cohesion

because homeowners are less likely than renters to move since they have a financial commitment tied to that location. A community with high homeowner-occupancy is generally assumed to be stable, a place where residents have a personal connection to neighbors and the neighborhood.

Feelings and Concerns about the Community and Flooding

Number of Visits to Friends/Family per Week (Question 14)

The number of visits to friends and family per week is a primary indicator of community cohesion. When asked how many times they visited with friends and family in the area, responses varied from 1 to 9 visits, with an average of 3.6 visits per week. Several respondents provided a range to the Contractor; in these cases, the average of the range was used. For example, if the respondent indicated they visit friends and family 2 to 3 times per week, an average of 2.5 visits per week was used.

When data is broken down by correlating the number of years of residence in the current home compared to the number of visits made each week, residents that have lived there between 20 and 29 years visit friends and family more often, on average, than those that have lived in the neighborhood longest.

Reside at Current Location	Total Number of Visits	Average Visits per Week
0 - 9 years	247.5	3.3
10 - 19 years	98.5	3.1
20 -29 years	73	3.7
30 + years	94.5	3.2

When data is broken down by correlating age and the number of visits made each week, residents 20 to 44 years of age and over visit friends and family most often. When comparing employment status and the number of visits made each week, retired persons were found to visit friends and family more often.

Characteristic	Total Number of Visits	Average Visits per Week
20 - 44 years	175.5	3.7
45 - 64 years	166	2.8
65 + years	175.5	3.4
Employed/Self-Employed	181	2.9
Retired	214.5	3.5

Special Characteristics of the Neighborhood (Question 15)

When asked if there were characteristics about the neighborhood that were special to them, 44 respondents (27.3 percent) answered that there was nothing special about the neighborhood. The responses from those who feel the neighborhood has special characteristics (117 respondents) were relatively consistent. Responses were grouped into the following categories:

Special Characteristics	Number of Responses	% of Total Responses
Quiet, Peaceful	39	33.3%
Family, Neighbors	35	29.9%
Good Location	34	29.1%
Convenient	10	8.5%
Private, Exclusive	10	8.5%
Safety	9	7.7%
Nice Area	7	6.0%
My Home, Heritage	6	5.1%
Good for Children	6	5.1%
No Trouble, No Problems	5	4.3%
Well-Maintained, Clean	4	3.4%
River	3	2.6%
Low Traffic	1	0.9%
Flat Land	1	0.9%
Comfortable	1	0.9%

This open-ended question allowed respondents to explain, in their own words, why they like their neighborhood and what characteristics they feel are special. Peacefulness, family and neighbors, and good location were the most common responses. Other responses included: convenient, private, safe, it's a nice area, and my home or heritage.

Concern about Flooding (Question 18)

Of the 161 respondents, 18.6 percent were very concerned about future flooding, 34.8 percent were somewhat concerned, and 46.6 percent were not at all concerned about flooding. The length of time interviewees have occupied their buildings may affect respondent attitudes about flooding only slightly. Of respondents who have occupied their home for 30 or more years, 83.3 percent are somewhat or very concerned about future flooding. Of the respondents who have occupied their structures for less than 30 years, fewer (81.8 percent) indicated they were somewhat or very concerned about flooding.

Moving Preferences (Question 22)

Of the 161 respondents, 10 respondents were unable to answer this question. Of the 151 respondents who did answer Question 22, 67.8

percent would prefer to stay within the neighborhood or community if they were required to relocate and an additional 21.2 percent would prefer to relocate to another part of Floyd County (total of 89.0 percent). Of the remaining respondents, 4.1 percent would prefer to relocate outside of the county, but within the Commonwealth of Kentucky, and 3.4 percent would prefer to move outside of the state.

Major Concerns about Acquisition (Question 23)

When asked about their biggest concerns if their home and property were to be acquired, 93.8 percent of respondents identified at least one major concern and many identified more than one. Identifying more than one major concern indicates respondents' overall concern regarding acquisition is high. A majority of respondents identified "getting a fair price for your home and moving expenses" as a major concern. A total of 12 respondents identified other concerns.

Major Concerns about Acquisition	Number of Responses	% of Total Respondents
Fair Price and Moving Expenses	125	77.6%
Locating Suitable House/Apt.	99	61.5%
Finding a Good Neighborhood	95	59.0%
Cost of Purchasing/Financing	48	29.8%
Finding Good Schools	45	28.0%
Maintaining Old Friendships	36	22.4%
Other		
- Refuse to Move	9	5.6%
- Finding Employment	1	0.6%
- Friendly Location in the Area	1	0.6%
- Rent and Utility Costs	1	0.6%
No Concerns	10	6.2%

Flooding Solution Preferences (Question 24)

When asked to choose possible solutions to the local flooding problems, as a whole, respondents agreed that some measure of flood protection was necessary, although responses were dispersed among the six options provided. Among the respondents, "channel modifications to reduce flood levels" was the most common response. Respondents were allowed to "check all that apply," thus the total number of responses (223) exceeds the number of respondents (139). Of the 161 respondents, 22 respondents had no opinion or preference about permanent flood problem solutions.

Preferences for Permanent Flood Problem Solutions	Number of Responses	% of Total Respondents
Channel Modifications to Reduce Flood Levels	76	47.2%
Permanent New Floodwalls & Levees	52	32.3%
No Opinion	22	13.7%
Raise and/or Floodproofing Most-Frequently Flooded Structures	19	11.8%
Present City Levees, Combined with Emergency Flood Fighting & Flood Forecasting	14	8.7%
Relocating Most-Frequently Flooded Structures	13	8.1%
Flood Insurance & Floodplain Zoning	13	8.1%
Other		
- Dredge River/Clean River Banks	7	4.3%
- Install Pump Stations	2	1.2%
- Install Locks on the River	1	0.6%
- Repair Storm Drain Problems	1	0.6%
- Raise Water Level at Fishtrap Lake	1	0.6%
- All Good Options	1	0.6%
- No Good Options	1	0.6%

Other flood solutions presented by residents included several ideas related to channel modifications, such as: dredge the river, clean the river banks, install locks along the river, and install pump stations.

Conclusions

The number of visits to friends and family per week is a primary indicator of community cohesion. The more connected residents are within the community, measured by the number of visits to friends and family during the week, the more likely they are to stay. While respondents visit friends and family more than every other day, only 21.7 percent indicated that family or neighbors are what make their neighborhood special. Respondents mentioned nothing or peacefulness more often than family or neighbors. When asked what major concerns they had about acquisition, 22.4 percent of respondents considered maintaining old friendships a major concern, which ranked sixth among six response options. Residents were much more concerned about getting a fair price for their home and moving expenses (77.6 percent) and locating a suitable house or apartment (61.5 percent). While family, friends, and neighbors are an advantage of the area, other advantages seem to keep residents in their current location.

Eighty-nine percent of respondents would prefer to stay within their own community/neighborhood or within Floyd County if they were required to relocate due to acquisition. This high percentage

indicates that a very high level of community cohesion currently exists. Residents want to stay in the area because of the many special neighborhood characteristics they indicated, specifically peacefulness, family, neighbors, location, convenience, privacy, and heritage. Residents are also concerned that if their homes are acquired, they may have difficulty finding another suitable neighborhood. For the reasons mentioned above, the Corps should evaluate the need for providing Community Development Sites should suitable relocation sites prove unavailable.

Participation Rate

Raise-in-Place Participation (Question 21A)

When asked about their desire to participate in a raise-in-place floodproofing alternative for their home, 73.3 percent indicated interest in participating in a raise-in-place floodproofing program. The overall nonstructural raise-in-place participation rate is 77.1 percent.

When data is broken down by age groups, the youngest age group was the most likely to indicate interest in the raise-in-place program. Of residents 20 – 44 years of age, 77.1 percent indicated interest in participating, while 71.2 percent of residents 45 – 64 years old and 72.2 percent of residents 65 years and older indicated interest. When data is broken down by income levels, residents who earn less than $25,000 were the most likely to indicate interest in participating (78.9 percent). By comparison, 64.0 percent of residents earning more than $50,000 and 72.4 percent of residents earning between $25,000 and $50,000 indicated interest in participating.

Acquisition Participation (Question 21B)

By comparison, when given the second option of being acquired by the Government, 64.6 percent of respondents were willing to participate. The overall nonstructural acquisition participation rate is 67.4 percent.

When data is broken down by age groups, residents age 65 years and older were the most likely to indicate interest in the acquisition program (66.7 percent). Of residents 20 – 44 years of age, 64.6 percent indicated interested in participating, while 62.7 percent of residents 45 – 64 years of age indicated interest. When data is broken down by income levels, residents who earn less than $25,000 were the most likely to indicate interest in participating (67.3 percent). By comparison, 62.1 percent of residents earning between $25,000 and $50,000, and 64.0 percent of residents earning greater than $50,000 indicated interest in participating.

Participation appears to be more likely among nonresidential nonstructural survey respondents than residential; 24.8 percent of respondents indicated they would not participate in either program, while 62.7 percent would participate in either the raise-in-place or acquisition program.

Conclusions

Participation rates are difficult to determine accurately due to the number of influences which contribute to this kind of decision. In addition, a respondent may change their mind once, if not several times, after gathering all pertinent information and further evaluating options. Participation rates may also vary due to community cohesion – if a group of residents is willing to participate, this may influence others who are undecided to participate as well. The information gathered during the personal interviews may vary from final participation rates, but it does provide a benchmark and indicates willingness to participate in the nonstructural program.

In general, respondents were much more interested in participating in an acquisition program than a floodproofing program. If alternative development sites were not available in the same community, acquisition participation rates may vary.

Overall Nonstructural Area Existing Community Cohesion

As discussed earlier, the measurement of community cohesion is relatively difficult to determine and not always precise due to difficulties in measuring opinions and preferences. The following will provide information about the nonstructural area's overall existing community cohesion.

Term of Occupancy

The average term of occupancy for residential survey respondents is 14.0 years and the average term for nonresidential survey respondents is 15.9 years. All nonstructural survey respondents have occupied their structure for an average of 14.8 years. Longer terms of occupancy tend to increase community cohesion because neighborhoods and commercial areas are more stable. The high average term of occupancy among nonstructural survey respondents indicates a high level of community cohesion.

Frequency of Visits

The average number of visits to friends and family per week confirms a moderate level of community cohesion. Residential survey respondents reported visiting 3.6 times per week, which equates to visiting about every other day. The more connections and contacts residents have in an area, the more likely they are to remain even if required to relocate. They may also have some effect on participation in floodproofing programs.

Number of Families with Children

The survey questionnaire does not specifically ask the number of children per household, although respondent age and number of residents in the household were asked. Using the information gathered by the survey, several assumptions were made to estimate the percent of families with children within the survey area. First, it was assumed respondents over the age of 55 years do not have children still living at home even if their household size is greater than two persons. Second, it was assumed respondents younger than 55 years of age with households greater than two persons do have children living at home. Third, it was assumed that all households are family households. Based upon these assumptions, it is estimated that among nonstructural survey respondents 26.7 percent of households were families with children present. Compared to year 2000 Census data, 33.0 percent of all households in Floyd County were families with children under 18 years of age, 32.5 percent of all households in Kentucky were families with children, and 32.8 percent of all households in the United States were families with children present.

The presence of children in the household typically promotes community cohesion through the involvement of parents in school activities, church and community groups. Community cohesion as measured under this criterion appears to be low.

Rate of Owner-Occupancy

The majority of respondents currently own the structure where they reside or operate their business. Owner-occupancy among the nonresidential respondents is 68.4 percent and among the residential respondents it was slightly higher at a rate of 77.0 percent. Ownership typically indicates that residents and owner/operators are engaged in their community and value the area enough to purchase property. This connection to the area also confirms a moderate level of community cohesion.

Employment Status

Employment status is important in considering community cohesion because community ties are typically stronger when a person is employed in the area. The workplace can be a place of socializing as well as lead to other social activities. Retirees also tend to socialize more with other retirees and often with other retirees of the same industry or employer because they have common bonds. Survey results show that 85.2 percent of respondents are employed, retired, or disabled. A high percentage of respondents were unemployed (8.9 percent) compared to 4.2 percent of Floyd County's population over the age of 16 in 2000. The unemployment rate for survey respondents (unemployed percentage of labor force) is 18.4 percent compared to 10.0 percent for the county as a whole in 2000. In 2000, adjacent counties averaged an unemployment rate of 10.4 percent.

Respondents also reported traveling an average of 18.1 minutes to work (and an average 12.6 miles to work) compared to a median commute time of 25.8 minutes for all Floyd County residents in 2000. Consideration of the employment criterion indicates a moderate level of community cohesion.

Relocation Preference

If required to relocate, 88.4 percent of nonstructural survey respondents indicated they would prefer to stay in their current community or neighborhood or within Floyd County. These high rates indicate a high level of community cohesion. Residents and owner/operators want to maintain schools for their children, want to remain in a safe and peaceful neighborhood, want to maintain their businesses, and want to stay close to friends and family, whom they visit frequently.

Special Characteristics of the Neighborhood

Several of the nonstructural survey respondents listed special characteristics of the neighborhood that imply a moderate level of community cohesion. A total of 39.0 percent of respondents indicated nothing made their neighborhood or location special (85 respondents). Of the remaining 133 respondents, 26.3 percent said people (friends, family or customers) made the neighborhood or location special, 4.5 percent of respondents indicated that their home or heritage was special, 4.5 percent of respondents indicated that the neighborhood was special because it was a good place to raise children. Maintaining relationships if acquisition by the Government were required was a major concern for 31.1 percent of respondents. Although not the most frequently cited special characteristics or concerns about acquisition, it is apparent that connections, contacts, stability, and heritage currently exist and these are elements that are important for some respondents.

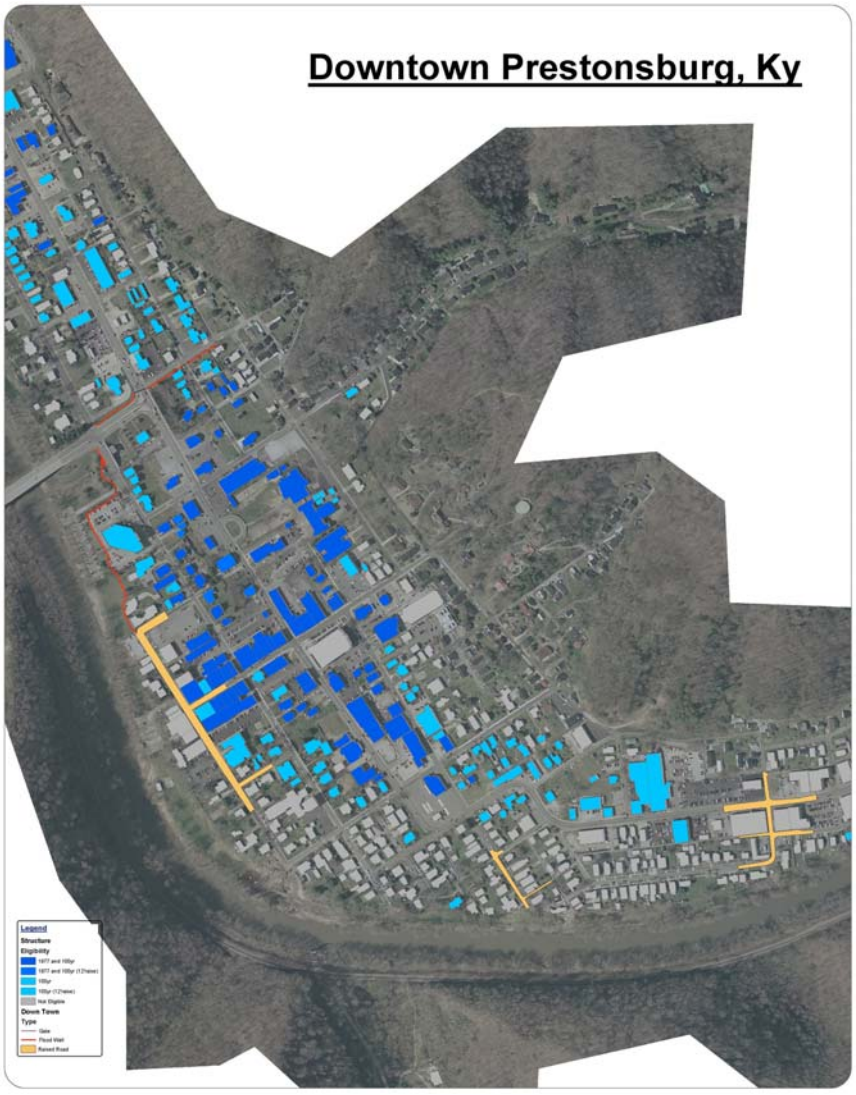
Geographically dispersed along the Levisa and Russell Fork Rivers, overall community cohesion of the nonstructural survey area is moderate.

Downtown Prestonsburg Area Survey Results and Community Cohesion

Downtown Prestonsburg Area

A subgroup of the structural survey responses was analyzed in order to evaluate the overall existing community cohesion of the protected and impacted area of the Prestonsburg short floodwall alternative (explained in more detail in Part 2 of this report). Of the 112 structures surveyed for Zones A and B, 40 structures would be included in the subgroup described above (35.7 percent). Of the 40 questionnaires completed, nonresidential responses accounted for 62.5 percent (25 responses) and residential responses accounted for the remaining 37.5 percent (15 responses). This group of respondents will be referred to as "downtown Prestonsburg respondents."

Figure 4: Downtown Prestonsburg



Structures and Flooding

Occupied Tenure, Ownership and Age of Structure

Within the downtown Prestonsburg area, respondents have occupied their structures for an average of 19.1 years. Term of occupancy ranged from 6 months to 100 years.

The average age of all structures, as reported, is 48.8 years, with a range between 4 years and 122 years. Six respondents were unable to answer this question, thus, the average was figured based on 34 respondents.

A total of 72.5 percent of structures are owner-occupied, either as residential units, businesses or churches. The remaining 27.5 percent of structures are renter-occupied.

Knowledge about Flooding, Flood Insurance, Number of Times Experienced Flooding and Experiences as a Result of Flooding

Of the 40 respondents, one was unable to say whether they would have moved or purchased their structure if they had been aware of flooding problems. Of the 39 who were able to answer, 23 answered in the affirmative - that they would have moved to the location even if they knew it could be flooded (59.0 percent). The remaining 16 respondents answered in the negative – that they would not have moved to the location if they had been aware of the possibility of flooding (41.0 percent).

According to respondents, 15.8 percent currently pay for flood insurance, while 84.2 percent do not. Two respondents were unable to answer this question; therefore, the percentages presented above are based on 38 responses.

A majority of respondents indicated they have never experienced flooding while occupying their current location (85.0 percent). A total of six respondents reported flooding: four respondents have experienced flood once in the past (10.0 percent) and two respondents reported flooding twice during their occupancy of the structure (5.0 percent).

Of the six respondents who have experienced flooding, 100.0 percent experienced flood damages, 33.3 percent experienced dislocation from work, 33.3 percent experienced lost work days and wages, 16.7 percent experienced children missing school days or employees missing work, and none had medical expenses related to flooding.

Conclusions

Length of structure occupancy and owner-occupancy are both indicators of community cohesion. Forty percent of the structures in downtown Prestonsburg have been occupied by the interviewee for less than ten years, although the average term of occupancy is 19.1 years. In addition, owner-occupancy was high among occupants of downtown Prestonsburg structures (72.5 percent). These statistics indicate a high level of community cohesion in the downtown area.

Feelings and Concerns about the Community and Flooding

Number of Visits to Friends/Family per Week

Among the residential surveys completed for the downtown Prestonsburg area (15 responses), respondents reported visiting with friends and family in the area an average of 2.7 times per week. The number of visits per week varied from 0 to 7 times.

Special Characteristics of the Neighborhood

When asked if there were characteristics about the neighborhood that were special to them, 17 respondents (11.4 percent) answered that there was nothing special about the neighborhood. The responses from those who feel the neighborhood has special characteristics (23 respondents) are listed below.

This open-ended question allowed respondents to explain, in their own words, why they like their neighborhood and what characteristics they feel are special. Among downtown Prestonsburg respondents good location, peacefulness, convenience, historical home or building, and good accessibility were among the most common responses. Because the downtown Prestonsburg responses are a combination of residential and nonresidential surveys, some responses have a much lower percentage when compared to strictly one category of survey responses. For example, among all nonresidential respondents “good accessibility, high traffic volume and visibility” was mentioned as a special characteristic by 27.3 percent of respondents.

Special Characteristics	Number of Responses	% of Total Responses
Good Location	9	39.1%
Quiet, Peaceful	6	26.1%
Convenient	6	26.1%
Historical Home or Building	4	17.4%
Good Accessibility, High Traffic Volume, Visibility	3	13.0%
Family, Neighbors	1	4.3%
First Floor Access	1	4.3%
Heritage	1	4.3%
Safety	1	4.3%

Concern about Flooding

When asked about future flooding concerns, 5.0 percent of downtown Prestonsburg respondents were very concerned about future flooding, 32.5 percent were somewhat concerned, and 62.5 percent were not at all concerned about flooding.

Respondents in the downtown Prestonsburg area are slightly less concerned about future flooding than all structural respondents. A total of 38.4 percent of respondents are very or somewhat concerned among all structural respondents, whereas 37.5 percent of downtown Prestonsburg respondents are very or somewhat concerned about future flooding. Downtown Prestonsburg respondents may be less concerned because they recognize that downtown is located on higher ground than other parts of Prestonsburg.

Feelings and Major Concerns about Acquisition

When asked about their structure being acquired by the Government, respondents equally supported and opposed acquisition. Forty percent of respondents in downtown Prestonsburg either support or strongly support acquisition, 40.0 percent of respondents either oppose or strongly oppose acquisition, and 20.0 percent had no opinion.

Major concerns about being acquired by the Government were reported by all downtown Prestonsburg respondents. “Finding a good location or neighborhood” was the most common response when asked to identify major concerns.

Major Concerns about Acquisition	Number of Responses	% of Total Respondents
Finding a Good Location or Neighborhood	33	82.5%
Fair Price and Moving Expenses	24	60.0%
Locating Suitable Building or Home	24	60.0%
Maintaining Relationships	16	40.0%
Cost of Re-establishing Business or Purchasing Home	13	32.5%
Finding Good Schools	4	10.0%
No Concerns	0	0.0%

Moving Preferences

When asked about their moving preferences if the Government acquired their structure, five respondents were undecided about where they would move, and therefore did not answer the question. Of the 35 respondents who did answer, 82.9 percent would prefer to stay within the neighborhood or community if they were required to relocate. Three respondents would prefer to relocate to another part of Floyd County (8.6 percent), and three respondents would prefer to relocate outside of the county, but within the Commonwealth of Kentucky (8.6 percent). No respondents indicated interest in moving outside of the state or in closing their businesses.

Major Concerns about Floodwall or Levee

When asked about major concerns about a new levee or floodwall being built near their home, as a group, downtown Prestonsburg respondents indicated that its appearance was their biggest concern (51.3 percent). Of the 40 respondents, one gave no response to this question. Of the 39 survey respondents that did answer this question, nine had no major concerns about a floodwall or levee. Respondents were allowed to "check all that apply," thus the total number of responses (101) exceeds the number of respondents (39).

Major Concerns about Floodwall or Levee	Number of Responses	% of Total Respondents
Appearance	20	51.3%
Impact on Property Value	18	46.2%
Type of Construction	15	38.5%
Distance from Residence or Business	11	28.2%
Visibility from Residence or Business	10	25.6%
Impact on Activities Around Home or Business	10	25.6%
No Concerns	9	23.1%
Safety During Floods	8	20.5%
No Response	1	2.6%

Flooding Solution Preferences

When asked to choose possible solutions to the local flooding problems, downtown Prestonsburg respondents agreed that some measure of flood protection was necessary.

Preferences for Permanent Flood Problem Solutions	Number of Responses	% of Total Respondents
Channel Modifications to Reduce Flood Levels	14	50.0%
Permanent New Floodwalls & Levees	11	39.3%
Relocating Most-Frequently Flooded Structures	8	28.6%
Raise and/or Floodproofing Most-Frequently Flooded Structures	7	25.0%
No Opinion	5	17.9%
Other	4	14.3%
Flood Insurance & Floodplain Zoning	3	10.7%
Present City Levees, Combined with Emergency Flood Fighting & Flood Forecasting	3	10.7%

Of the 40 respondents, most considered channel modifications to reduce flood levels be a good solution to the local flood problems. Five respondents did not answer the question, stating that they either did not feel qualified to answer or they had no opinion. Respondents were allowed to “check all that apply,” thus the total number of responses (55) exceeds the number of respondents (35).

Conclusions

The number of visits to friends and family per week is a primary indicator of community cohesion. The more connected residents are within the community, measured by the number of visits to friends and family during the week, the more likely they are to remain in the area. On average, residents of downtown Prestonsburg visited friends and family 2.7 times per week, compared to 3.6 for all residential structures surveyed. Downtown Prestonsburg residents reported visiting less often than other survey respondents, thus visitation frequency represents a low to moderate level of community cohesion.

Good location, peacefulness, and convenience were the top responses among downtown Prestonsburg respondents when asked what made the neighborhood special. Downtown Prestonsburg provides an excellent location for businesses (high accessibility, visibility and traffic volume) and many residents live near by because of the convenience and closeness to local businesses and amenities. When asked what major concerns they had about Government acquisition, 40.0 percent of respondents considered maintaining relationships a

major concern, which was higher than among other residential (structural or nonstructural) survey groups. Residents were still more concerned about finding a good neighborhood or location to move to (82.5 percent).

When asked about moving preferences, approximately 92 percent of respondents would prefer to stay within their own neighborhood or within Floyd County if they were required to relocate due to acquisition. This high percentage indicates that a very high level of community cohesion currently exists. Residents want to stay in the area because of the many special neighborhood characteristics they noted.

Participation Rate

Raise-in-Place Participation

When asked about their desire to participate in a raise-in-place floodproofing alternative for their home or business, 65.0 percent indicated interest in participating in the floodproofing program.

Acquisition Participation

When given the option of being acquired by the Government, 70.0 percent of respondents were willing to participate in an acquisition program.

Conclusions

As discussed earlier, participation rates are difficult to determine accurately due to the number of influences which contribute to this kind of decision. A high participation rate for these programs is consistent with all structural and all nonstructural responses. Although the participation rate is high, the raise-in-place floodproofing option is problematic for some nonresidential structures. The raise-in-place option is not feasible for an estimated 65 percent of nonresidential structures in the downtown area because of the age of buildings and their overall structural quality. A slightly higher rate of participation was reported for the acquisition program, although participation in this program may impact the core business district significantly.

Overall Existing Community Cohesion

Again, the measurement of community cohesion is relatively difficult to determine and not always precise due to difficulties in measuring opinions and preferences. The following will provide information about downtown Prestonsburg's overall existing community cohesion.

Term of Occupancy

The average term of occupancy for all downtown Prestonsburg respondents is 19.1 years. Longer terms of occupancy tend to increase community cohesion – neighborhoods and commercial areas are more stable. The high average term of occupancy among survey respondents indicates a high level of community cohesion.

Frequency of Visits

The average number of visits to friends and family per week confirms a moderate level of community cohesion. Residential survey respondents reported visiting 2.7 times per week, which equates to visiting less than every other day. The more connections and contacts residents have in an area, the more likely they are to remain even if required to relocate. They may also have some effect on participation in floodproofing programs.

Number of Families with Children

The survey questionnaire does not specifically ask the number of children per household, although respondent age and number of residents in the household were asked. Using the information gathered by the survey, several assumptions were made to estimate the percent of families with children within the survey area. First, it was assumed respondents over the age of 55 years do not have children still living at home even if their household size is greater than two persons. Second, it was assumed respondents younger than 55 years of age with households greater than two persons do have children living at home. Third, it was assumed that all households are family households. Based upon these assumptions, it is estimated that among downtown Prestonsburg survey respondents 26.7 percent of households were families with children present. Compared to year 2000 Census data, 33.0 percent of all households in Floyd County were families with children under 18 years of age, 32.5 percent of all households in Kentucky were families with children, and 32.8 percent of all households in the United States were families with children present.

The presence of children in the household typically promotes community cohesion through the involvement of parents in school activities, church and community groups. Community cohesion as measured under this criterion appears to be low.

Rate of Owner-Occupancy

The majority of respondents currently own the structure where they reside or operate their business. Owner-occupancy among the nonresidential respondents in downtown Prestonsburg was 64.0 percent and among the residential respondents it was even higher at a rate of 86.7 percent. Ownership typically indicates that residents and owner/operators are engaged in their community and value the area enough to purchase property. This connection to the area also confirms a high level of community cohesion.

Employment Status

Employment status is important in considering community cohesion because community ties are typically stronger when a person is employed in the area. The workplace can be a place of socializing as well as lead to other social activities. Retirees also tend to socialize more with other retirees and often with other retirees of the same industry or employer because they have common bonds. Survey results show that 100 percent of respondents are employed, retired, or disabled. No respondents in downtown Prestonsburg were unemployed. The unemployment rate for the county as a whole in 2000 was 10.0 percent. In 2000, adjacent counties averaged an unemployment rate of 10.4 percent. Respondents also reported traveling an average of 6.9 minutes to work (and an average of 3.6 miles to work) compared to an average of 25.8 minutes for all Floyd County residents in 2000. Consideration of the employment criterion indicates a high level of community cohesion.

Relocation Preference

If required to relocate, 91.5 percent of downtown Prestonsburg survey respondents indicated they would prefer to stay in their current community/neighborhood or within Floyd County. This high rate indicates a very high level of community cohesion. Residents and owner/operators want to stay close to friends and family, want to maintain schools for their children, want to remain in a safe and peaceful neighborhood, and want to maintain their businesses.

Special Characteristics of the Neighborhood

Several of the survey respondents listed special characteristics of the neighborhood that imply a low level of community cohesion. A small percentage of respondents indicated people (friends, family or customers) made the neighborhood or location special (4.5 percent), 4.5 percent of respondents indicated that the area was special because of sentimental reasons, and 10 percent indicated that the area or building has historical value. Although, maintaining relationships if acquisition by the Government were required was a major concern for 40.0 percent of respondents. Some connections, contacts, stability, and heritage exist within downtown Prestonsburg.

Overall community cohesion of the downtown Prestonsburg area is moderately high. This area is the core of Prestonsburg physically and acts as its center of economic, cultural, social, and political activity.

Blackbottom Neighborhood Survey Results and Community Cohesion

BLACKBOTTOM NEIGHBORHOOD

A subgroup of the structural survey responses was analyzed in order to evaluate the overall existing community cohesion of the protected and impacted area of the Blackbottom floodwall structural alternative (explained in more detail in Part 2 of this report). Of the 112 structures surveyed for Zones A and B, 31 structures would be included in the subgroup described above (27.7 percent). Of the 31 questionnaires completed, nonresidential responses accounted for 35.5 percent (11 responses) and residential responses accounted for the remaining 64.5 percent (20 responses). This group of respondents will be referred to as "Blackbottom neighborhood respondents." The Blackbottom neighborhood is located north of downtown Prestonsburg and includes Prestonsburg High School and the residential and commercial areas directly to the north of the school.

Figure 5: Blackbottom Neighborhood Area

Structures and Flooding

Occupied Tenure, Ownership and Age of Structure

Within the Blackbottom neighborhood, respondents have occupied their structures for an average of 19.9 years. Term of occupancy ranged from 1 month to 54 years.

The average age of all structures, as reported, is 37.9 years, with a range between 10 years and 80 years. One respondent was unable to answer this question, thus, the average was figured based on 30 respondents.

A total of 74.2 percent of structures are owner-occupied, either as residential units, businesses or churches. The remaining 25.8 percent of structures are renter-occupied.

Knowledge about Flooding, Flood Insurance, Number of Times Experienced Flooding and Experiences as a Result of Flooding

Of the 31 respondents, one was unable to say whether they would have moved or purchased their structure if they had been aware of flooding problems. Of the 30 who were able to answer, 12 answered in the affirmative - that they would have moved to the location even if they knew it could be flooded (40.0 percent). The remaining 18 respondents answered in the negative – that they would not have moved to the location if they had been aware of the possibility of flooding (60.0 percent).

According to respondents, 25.0 percent currently pay for flood insurance, while 75.0 percent do not. Three respondents were unable to answer this question; therefore, the percentages presented above are based on 28 responses.

A majority of respondents indicated they have never experienced flooding while occupying their current location (80.7 percent). A total of six respondents reported flooding: five respondents have experienced flood once in the past (16.1 percent) and one respondent reported flooding twice during their occupancy of the structure (3.2 percent).

Of the six respondents who have experienced flooding, 16.7 percent experienced flood damages, 16.7 percent experienced lost work days and wages, and none experienced dislocation from work, children missing school days or employees missing work, or had medical expenses related to flooding.

Conclusions

Length of structure occupancy and owner-occupancy are both indicators of community cohesion. The average term of occupancy is 19.9 years. In addition, owner-occupancy was high among residents and owner/operators within the Blackbottom neighborhood (74.2 percent). These statistics indicate a high level of community cohesion in the Blackbottom neighborhood.

Feelings and Concerns about the Community and Flooding

Number of Visits to Friends/Family per Week

Among the residential surveys completed for the Blackbottom neighborhood (20 responses), respondents reported visiting with friends and family in the area an average of 3.1 times per week. The number of visits per week varied from 0 to 7 times.

Special Characteristics of the Neighborhood

When asked if there were characteristics about the neighborhood that were special to them, eight respondents (25.8 percent) answered that there was nothing special about the neighborhood. The responses from those who feel the neighborhood has special characteristics (23 respondents) are listed below.

This open-ended question allowed respondents to explain, in their own words, why they like their neighborhood and what characteristics they feel are special. Among Blackbottom neighborhood respondents peacefulness, safety, good location, convenience, and good accessibility were among the most common responses.

Special Characteristics	Number of Responses	% of Total Responses
Quiet, Peaceful	11	47.8%
Safety	8	34.8%
Convenient	5	21.7%
Good Location	5	21.7%
Good Accessibility, High Traffic Volume, Visibility	4	17.4%
Historical Home or Building	4	17.4%
Family, Neighbors	3	13.0%
Good Accessibility, High Traffic Volume, Visibility	3	13.0%
Heritage, Sentimental	2	8.7%
Adequate Parking	1	4.3%
No Traffic	1	4.3%
Private	1	4.3%

Concern about Flooding

When asked about future flooding concerns, 16.1 percent of Blackbottom neighborhood respondents were very concerned about future flooding, 25.8 percent were somewhat concerned, and 58.1 percent were not at all concerned about flooding.

Respondents in the Blackbottom area are more concerned about future flooding than all structural respondents. A total of 38.4 percent of respondents are very or somewhat concerned among all structural respondents, whereas 41.9 percent of the Blackbottom neighborhood's respondents are very or somewhat concerned about future flooding. Blackbottom neighborhood respondents may be more concerned due to the area's topography. The neighborhood is located near a point along the river where water begins to overtop the river bank and flood structures.

Feelings and Major Concerns about Acquisition

A majority of respondents (74.2 percent) either oppose or strongly oppose their home being acquired in order to construct a larger flood protection project that would protect part or all of the community, 22.6 percent either support or strongly support being acquired and one respondent had no opinion about being acquired as part of a larger flood protection project (3.2 percent).

Major concerns about being acquired by the Government were reported by all Blackbottom neighborhood respondents. Similar to respondents in downtown Prestonsburg, "finding a good location or neighborhood" was the most common response when asked to identify major concerns.

Major Concerns about Acquisition	Number of Responses	% of Total Respondents
Fair Price and Moving Expenses	24	77.4%
Locating Suitable Building or Home	21	67.7%
Finding a Good Location or Neighborhood	21	67.7%
Cost of Re-establishing Business or Purchasing Home	20	64.5%
Maintaining Relationships	17	54.8%
Finding Good Schools	4	12.9%
No Concerns	0	0.0%

Moving Preferences

When asked about their moving preferences if the Government acquired their structure, two respondents were undecided about where they would move, and therefore did not answer the question. Of the 29 respondents who did answer, 89.7 percent would prefer to stay within the neighborhood or community if they were required to relocate. One respondent would prefer to relocate to another part of Floyd County (3.4 percent), and two respondents would prefer to

relocate to another state (7.7 percent). No respondents indicated interest in moving outside of county, but within the state or in closing their businesses.

Major Concerns about Floodwall or Levee

When asked about major concerns about a new levee or floodwall being built near their home, as a group, Blackbottom neighborhood respondents indicated that its appearance was their biggest concern (56.7 percent). Downtown Prestonsburg respondents also indicated appearance was their biggest concern. Of the 31 respondents, one gave no response to this question. Of the 30 survey respondents that did answer this question, four had no major concerns about a floodwall or levee. Respondents were allowed to "check all that apply," thus the total number of responses (99) exceeds the number of respondents (30).

Major Concerns about Floodwall or Levee	Number of Responses	% of Total Respondents
Appearance	17	56.7%
Impact on Property Value	16	53.3%
Type of Construction	15	50.0%
Safety During Floods	14	46.7%
Distance from Residence or Business	12	40.0%
Visibility from Residence or Business	11	36.7%
Impact on Activities Around Home or Business	10	33.3%
No Concerns	4	13.3%
No Response	1	3.3%

Flooding Solution Preferences

When asked to choose possible solutions to the local flooding problems, Blackbottom neighborhood respondents agreed that some measure of flood protection was necessary.

Preferences for Permanent Flood Problem Solutions	Number of Responses	% of Total Respondents
Channel Modifications to Reduce Flood Levels	14	50.0%
Permanent New Floodwalls & Levees	11	39.3%
Other	7	25.0%
Raise and/or Floodproofing Most-Frequently Flooded Structures	4	14.3%
Relocating Most-Frequently Flooded Structures	4	14.3%
Flood Insurance & Floodplain Zoning	3	10.7%
Present City Levees, Combined with Emergency Flood Fighting & Flood Forecasting	2	7.1%

Three respondents did not answer the question, stating that they either did not feel qualified to answer or they had no opinion. Of the 28 respondents who did answer the question, most considered channel modifications to reduce flood levels to be a good solution to the local flood problems. Respondents were allowed to "check all that apply," thus the total number of responses (48) exceeds the number of respondents (28).

Conclusions

The number of visits to friends and family per week is a primary indicator of community cohesion. The more connected residents are within the community, measured by the number of visits to friends and family during the week, the more likely they are to remain in the area. On average, residents of the Blackbottom neighborhood visited friends and family 3.1 times per week, compared to 3.6 for all residential structures surveyed. Blackbottom neighborhood residents reported visiting more often when compared to downtown Prestonsburg respondents, although still less often than all residential survey respondents, thus visitation frequency represents a low to moderate level of community cohesion.

Peacefulness, safety, good location, convenience, and good accessibility were the top responses among Blackbottom neighborhood respondents when asked what made the neighborhood special. When asked what major concerns they had about Government acquisition, 54.8 percent of respondents considered maintaining relationships a major concern, which was higher than among all other survey groups. Residents were still more concerned about receiving a fair price for their structure and moving expenses (77.4 percent).

When asked about moving preferences, approximately 93 percent of respondents would prefer to stay within their own neighborhood or within Floyd County if they were required to relocate due to acquisition. This high percentage indicates that a very high level of community cohesion currently exists. Residents want to stay in the area because of the many special neighborhood characteristics they noted.

Participation Rate

Raise-in-Place Participation

When asked about their desire to participate in a raise-in-place floodproofing alternative for their home or business, 63.3 percent indicated interest in participating in the floodproofing program.

Acquisition Participation

When given the option of being acquired by the Government, 63.3 percent of respondents were also willing to participate in an acquisition program.

Conclusions

As discussed earlier, participation rates are difficult to determine accurately due to the number of influences which contribute to this kind of decision. A high participation rate for these programs is consistent with all structural and all nonstructural responses.

Overall Existing Community Cohesion

Again, the measurement of community cohesion is relatively difficult to determine and not always precise due to difficulties in measuring opinions and preferences. The following will provide information about the Blackbottom neighborhood's overall existing community cohesion.

Term of Occupancy

The average term of occupancy for all Blackbottom neighborhood respondents is 19.9 years. Longer terms of occupancy tend to increase community cohesion because neighborhoods and commercial areas tend to be more stable. The high average term of occupancy among survey respondents indicates a high level of community cohesion.

Frequency of Visits

The average number of visits to friends and family per week confirms a moderate level of community cohesion. Residential survey respondents reported visiting 3.1 times per week, which equates to visiting less than every other day. The more connections and contacts residents have in an area, the more likely they are to remain even if required to relocate. They may also have some effect on participation in floodproofing programs.

Number of Families with Children

The survey questionnaire does not specifically ask the number of children per household, although respondent age and number of residents in the household were asked. Using the information gathered by the survey, several assumptions were made to estimate the percent of families with children within the survey area. First, it was assumed respondents over the age of 55 years do not have children still living at home even if their household size is greater than two persons. Second, it was assumed respondents younger than 55 years of age with households greater than two persons do have children living at home. Third, it was assumed that all households are family households. Based upon these assumptions, it is estimated that among Blackbottom neighborhood survey respondents 25.0 percent of households were families with children present. Compared to year 2000 Census data, 33.0 percent of all households in Floyd County were families with children under 18 years of age, 32.5 percent of all households in Kentucky were families with children, and 32.8 percent of all households in the United States were families with children present.

The presence of children in the household typically promotes community cohesion through the involvement of parents in school

activities, church and community groups. Community cohesion as measured under this criterion appears to be low.

Rate of Owner-Occupancy

The majority of respondents currently own the structure where they reside or operate their business. Owner-occupancy among the nonresidential respondents in the Blackbottom neighborhood was 72.7 percent and among the residential respondents it was slightly higher at a rate of 75.0 percent. Ownership typically indicates that residents and owner/operators are engaged in their community and value the area enough to purchase property. This connection to the area also confirms a high level of community cohesion.

Employment Status

Employment status is important in considering community cohesion because community ties are typically stronger when a person is employed in the area. The workplace can be a place of socializing as well as lead to other social activities. Retirees also tend to socialize more with other retirees and often with other retirees of the same industry or employer because they have common bonds. Survey results show that 94.7 percent of respondents are employed, retired, or disabled. One respondent in Blackbottom was a homemaker, and not employed. The unemployment rate for the county as a whole in 2000 was 10.0 percent. In 2000, adjacent counties averaged an unemployment rate of 10.4 percent. Respondents also reported traveling an average of 9.6 minutes to work (and an average of 7.7 miles to work) compared to an average of 25.8 minutes for all Floyd County residents in 2000. Consideration of the employment criterion indicates a high level of community cohesion.

Relocation Preference

If required to relocate, 93.1 percent of downtown Prestonsburg survey respondents indicated they would prefer to stay in their current community/neighborhood or within Floyd County. This high rate indicates a very high level of community cohesion. Residents and owner/operators want to stay close to friends and family, maintain schools for their children, remain in a safe and peaceful neighborhood, and maintain their businesses.

Special Characteristics of the Neighborhood

Several of the survey respondents listed special characteristics of the neighborhood that imply a moderate level of community cohesion. A total of 25.8 percent of respondents indicated nothing made their neighborhood or location special, 17.4 percent indicated that the area or building has historical value, 13.0 percent indicated people (friends, family or customers) made the neighborhood or location special, and 8.7 percent of respondents indicated that the area was special because of sentimental reasons. Maintaining relationships if

acquisition by the Government were required was a major concern for 54.8 percent of respondents, which was higher than among all other survey groups. Although not the most frequently cited special characteristics or concerns about acquisition, it is apparent that connections, contacts, stability, and heritage currently exist within the Blackbottom neighborhood and these are elements that are important for respondents.

Overall community cohesion of the Blackbottom neighborhood area is moderately high. This area is a mixed-use, established neighborhood near the Prestonsburg High School.

STUDY KNOWLEDGE AND PUBLIC INVOLVEMENT

While collecting data for the community cohesion and social impact analysis, the Corps also included two questions at the end of each questionnaire that addressed the public's knowledge about the study and how they would like to be kept informed in the future.

Receiving Enough Information

Among all survey respondents, 73.3 percent said they are not receiving enough information to satisfy their interests, and 26.7 percent said they are receiving enough information. When comparing structural survey responses to nonstructural survey responses, the rates vary by less than a percentage point. While a majority of survey respondents are not receiving enough information about the study, many were aware of the study due to previous contact by the Corps or Corps contractors in the area. Some respondents noted they gathered information about the study and potential for a floodwall and levee by speaking with survey crews. This may have led to dissemination of false information and may explain why respondents said they are not receiving enough information.

Preferences about Public Involvement

When asked how respondents would like to be kept informed about the study, preferences leaned toward communication via printed materials.

Among all survey respondents:

- 50.0 percent would like to be kept informed via brochures;
- 40.6 percent would like to be kept informed via newspaper;
- 32.7 percent would like to be kept informed via radio or television;
- 22.7 percent would like to be kept informed via public meetings;
- 13.9 percent would like to be kept informed via direct mail; and
- 3.9 percent would like to be kept informed via a website or through electronic mail.

Brochure was the most preferred communication format among both structural survey respondents (43.8 percent) and nonstructural survey respondents (53.2 percent).

Among respondents that are willing to participate in the raise-in-place method of floodproofing their home and property:

- 55.0 percent would like to be kept informed via brochures;
- 47.8 percent would like to be kept informed via newspaper;
- 36.4 percent would like to be kept informed via radio or television;

- 27.3 percent would like to be kept informed via public meetings;
- 13.4 percent would like to be kept informed via direct mail; and
- 4.3 percent would like to be kept informed via a website or through electronic mail.

Among respondents that are willing to participate in acquisition of their home and property:

- 55.7 percent would like to be kept informed via brochures;
- 42.0 percent would like to be kept informed via newspaper;
- 33.0 percent would like to be kept informed via radio or television;
- 20.8 percent would like to be kept informed via public meetings;
- 11.8 percent would like to be kept informed via direct mail; and
- 4.7 percent would like to be kept informed via a website or through electronic mail.

Since a majority of respondents would like to be kept informed via printed materials, future public meetings or workshops may experience low attendance as long as information is provided by other methods.

Conclusions

Based upon survey responses, current communications with eligible residential and nonresidential owners are not adequate. Information distribution to potentially affected property owners should be improved. Notices to the county's Judge Executive, Fiscal Court and other leadership organizations may alleviate confusion, uncertainty and misinformation about the study and project.

Preferences for dispersing information took on many forms. A multi-method approach, which the Corps utilizes currently, should be maintained throughout the study and implementation of the project to keep residents informed. Most respondents prefer to receive information through brochures, although not all residents can be reached through this media and distributing brochures can prove to be an expensive form of communication. Although not as popular among respondents, personal contact or public meetings are typically more useful because the Corps can respond directly to comments, questions, and concerns. Direct mail to eligible structures or personal visits may also help to alleviate confusion and misinformation about the project.

Special Community Issues and Concerns

INTRODUCTION

The surveys conducted in Floyd County provide a comprehensive view of demographic characteristics, preferences, and feelings. Other information was gathered, both formally and informally, during the planning and survey process which also informed the community cohesion and social impact analysis. Information was gathered from personal interviews by the Government with potentially impacted residents and informally via fieldwork observations. The information gathered is presented below.

Special Community Issues

The following community issues were identified during fieldwork by the Corps.

- There exists a general reluctance of property owners who were not eligible to participate in the Section 202 Program to have a floodwall traverse their property. In part, this concern was voiced by residents who live along North Arnold Avenue.
- Residents expressed concerns that West Prestonsburg might be adversely impacted if a structural alternative, such as a floodwall, were built.
- Residents also expressed concerns that Archer Park, located along State Highway 114, might be adversely impacted by more frequent flooding thus affecting its community facilities if a structural alternative were built.

Fieldwork Observations

While conducting interviews in the project area, interviewers noted a few common concerns. The following supplementary fieldwork observations were noted by interviewers:

- Residents expressed concern that if they were required to move, there may be a lack of housing availability. Residents were specifically worried about locating comparable or equivalent housing in a good neighborhood. They expressed that Prestonsburg had a limited supply of certain types of housing.
- Residents expressed concern regarding misinformation, lack of information, and the sequence of project events. Many felt the Corps should have provided information and asked for input earlier in the planning process.

PART 2: COMMUNITY COHESION AND SOCIAL IMPACT ANALYSIS

Alternatives Retained for Detailed Consideration

Seven alternatives have been retained for detailed consideration by the Corps. Among the alternatives, one addresses flood protection completely by nonstructural means, five alternatives address flood protection through a combination of structural and nonstructural means, and one alternative proposed that no action is taken. The location of the structural flood protection is the differentiating factor between five of the alternatives.

In Floyd County, the structural method of flood protection is a floodwall and levee system. The structural alternatives developed by the Government for further consideration include: downtown Prestonsburg and north along the Levisa Fork to include the Big Sandy Community and Technical College (Alternative 2), downtown Prestonsburg and north along the Levisa Fork to include the Blackbottom neighborhood (Alternative 3), downtown Prestonsburg (Alternative 4), Blackbottom neighborhood (Alternative 5), and downtown Prestonsburg plus the Blackbottom neighborhood (Alternative 6).

All seven alternatives are briefly described below for reference in this report; however, more detailed descriptions can be obtained from the Government.

Alternative 1: No Action

The no action alternative assumes that the Corps, Floyd County and Prestonsburg do nothing to address flood protection within the project area. If no action is taken, a 100-year flood event would result in approximately $40 million in flood damages.

Alternative 2: Long Floodwall ending at the Big Sandy Community and Technical College + Nonstructural Program

The alignment of the long floodwall is designed to protect approximately 553 structures in Prestonsburg on the east side of the Levisa Fork. Alternative 2 would protect structures from the Big Sandy Community and Technical College on the north to the river bank at the south end of downtown, and between the Levisa Fork River on the west. The mountainside and East Burchett Street on the east would also be protected. An exhibit of the long floodwall and levee can be found in Appendix D of this report.

Structures eligible for the Section 202 Program, but not protected by the floodwall, could be protected by nonstructural methods. Participation in the nonstructural flood protection program is completely voluntary.

Alternative 3: Long Floodwall ending at Blackbottom + Nonstructural Program

Alternative 3 is a shorter variation of the long floodwall (Alternative 2), and terminates immediately south of the retail shopping complex located north of the Blackbottom neighborhood. The floodwall is designed to protect approximately 525 structures in Prestonsburg on the east side of the Levisa Fork.

Structures eligible for the Section 202 Program, but not protected by the floodwall, could be protected by nonstructural methods. Participation in the nonstructural flood protection program is completely voluntary.

Alternative 4: Downtown Prestonsburg Short Floodwall + Nonstructural Program

The short floodwall is designed to protect approximately 298 structures in downtown Prestonsburg from the State Highway 114 bridge south to the river bank, including most of downtown Prestonsburg, and extending from the Levisa Fork on the west to East Burchett Street on the east. The short floodwall and levee system has the same alignment as the long floodwall; however, the short floodwall alignment only protects structures within the central business district. Areas north of the State Highway 114 bridge would not be protected by the short floodwall alignment. An exhibit of the Prestonsburg short floodwall and levee can be found in Appendix D of this report.

Structures eligible for the Section 202 Program, but not protected by the floodwall, could be protected by nonstructural methods. Participation in the nonstructural flood protection program is completely voluntary.

Alternative 5: Downtown Prestonsburg Short Floodwall + Blackbottom Floodwall + Nonstructural Program

Alternative 5 combines the structural measures of Alternative 4 and also protects the Blackbottom neighborhood with a floodwall, leaving the area between the two floodwalls without protection by structural means. The Prestonsburg short floodwall and levee is designed to protect approximately 298 structures and the Blackbottom floodwall is designed to protect approximately 108 structures. The two floodwalls combined would protect 406 structures. An exhibit of the floodwalls can be found in Appendix D of this report.

Structures eligible for the Section 202 Program, but not protected by the floodwalls, could be protected by nonstructural methods.

Participation in the nonstructural flood protection program is completely voluntary.

Alternative 6: Blackbottom Floodwall + Nonstructural Program

The Blackbottom floodwall is designed to protect approximately 108 structures in the Blackbottom neighborhood, including Prestonsburg High School. The protected area would extend from the Levisa Fork on the west to the mountainside on the east, and from Prestonsburg High School on the south to an east-west alignment between the Blackbottom neighborhood and the retail shopping complex to its immediate north. An exhibit of the Blackbottom floodwall can be found in Appendix D of this report.

Structures eligible for the Section 202 Program, but not protected by the floodwall, could be protected by nonstructural methods. Participation in the nonstructural flood protection program is completely voluntary.

Alternative 7: Total Nonstructural Program

Under the Section 202 Program, a majority of the eligible structures could be protected by nonstructural methods. Nonstructural flood protection methods include: raise-in-place; move on site; replacement; veneer walls; ringwall/levee; owner replacement of structure (special requirements); and floodplain evacuation (also described as Government acquisition of structure and property).

There are an estimated 626 structures in the DPR 1 area of the Levisa Fork Basin of Floyd County eligible for participation in the Section 202 Program. Of these structures, approximately 437 are residential and 189 are nonresidential. Participation in the nonstructural flood protection program is completely voluntary.

Community Cohesion and Social Impacts of Alternatives

Existing community cohesion within Floyd County would be affected by implementation of the Section 202 Program alternatives as presented above. Impacts to community cohesion and the social fabric can be difficult to precisely assess. The following evaluation describes potential social impacts to the existing community cohesion of Floyd County and Prestonsburg.

Alternative 1: No Action

In general, social activity and patterns would remain constant if no action is taken to reduce flood damages. During flood events, the lack of flood protection could result in the following impacts:

1) Damage to residential and non-residential structures.
2) General public health, safety and welfare may be impaired.
3) Economic activity may be impacted.
4) Transportation, cultural and social patterns would be disrupted.

Alternative 2: Long Floodwall ending at the Big Sandy Community and Technical College + Nonstructural Program

The following impacts are possible if the Prestonsburg long floodwall including the Community College complex is implemented (Zones A and B):

1) The construction work limits (CWL) for the floodwall and levee system would impact 10 primary structures and 7 accessory structures (garages), and those properties located adjacent the river bank may be impacted by construction, loss of yard area and elimination of direct access to the river (approximately 23 structures). Impacts to the structures along the river may weaken the overall fabric of the neighborhood slightly and could reduce the desirability of the neighborhood as a place to live by current and future residents. As a result, property values may also be affected.
2) The floodwall and levee would protect approximately 553 structures, both residential and nonresidential.
3) The protected area may isolate areas west of the floodwall from Prestonsburg during times of high water and gate closure. However, it can be assumed that during times of high water, the river itself would interrupt activity. This may create several access and public safety issues, including access to medical services, fire and police services, grocery stores, and schools.

4) Introduction of the floodwall and levee would interrupt historical river access and potential future river access. A floodwall may also create a perception of lost river access for the general public.

5) Construction of the floodwall and levee system may have short-term noise and dust impacts for residents, Prestonsburg High School, the Community College and businesses within downtown Prestonsburg.

6) Property adjacent areas where local streets are raised may have changes in grade between the structure and street.

7) Construction of the floodwall and levee would protect residents, businesses, schools, community services and infrastructure, thus reducing flood hazard risk during a flood event and property damage caused by flooding. It is estimated that the long floodwall would prevent $36 million in flood damages during a 100-year flood event and $130 million in flood damages during a 500-year event.

8) In the event of a flood, the floodwall and levee would reduce cleanup costs and time, and lost days at work or school.

9) Construction of the floodwall and levee system would relieve residents and business owners of the costs of flood insurance.

10) Development restrictions associated with construction in the floodplain would be lifted creating opportunities for new growth, jobs and economic development.

11) The floodwall and levee system would reduce public health and safety risks during and after flood events.

Potential impacts described under Alternative 7: Total Nonstructural Program for all Zones if nonstructural flood protection methods were implemented would be the same.

Alternative 3: Long Floodwall ending at Blackbottom + Nonstructural Program

The following impacts are possible if this alternative is implemented (Zones A and B):

1) The construction work limits (CWL) for the floodwall and levee system would impact 10 primary structures and 3 accessory structures. The properties located adjacent the river bank may be impacted by construction, loss of yard area and elimination of direct access to the river (approximately 20 structures). Impacts to the structures along the river may weaken the overall fabric of the neighborhood slightly and could reduce the desirability of the neighborhood as a place to live by current and future residents. As a result, property values may also be affected.

2) The floodwall and levee would protect approximately 525 structures, both residential and nonresidential.

3) The protected area may isolate areas west of the floodwall from Prestonsburg during times of high water and gate closure. However, it can be assumed that during times of high water, the river itself would interrupt activity. This may create several access and public safety issues, including access to medical services, fire and police services, grocery stores, and schools.

4) Introduction of the floodwall and levee would interrupt historical river access and potential future river access. A floodwall may also create a perception of lost river access for the general public.

5) Construction of the floodwall and levee system may have short-term noise and dust impacts for residents, Prestonsburg High School, and businesses within downtown Prestonsburg.

6) Property adjacent areas where local streets are raised may have changes in grade between the structure and street.

7) Construction of the floodwall and levee would protect residents, businesses, schools, community services and infrastructure, thus reducing flood hazard risk during a flood event and property damage caused by flooding.

8) In the event of a flood, the floodwall and levee would reduce cleanup costs, and time and lost days at work or school.

9) Construction of the floodwall and levee system would relieve residents and business owners of the costs of flood insurance.

10) Development restrictions associated with construction in the floodplain would be lifted creating opportunities for new growth, jobs and economic development.

11) The floodwall and levee system would reduce public health and safety risks during and after flood events.

The following impacts are possible if nonstructural flood protection methods are implemented in areas that would be protected by Alternative 3 (a subgroup of Zones A and B):

1) The acquisition of structures could produce a higher demand for new development sites for both residential and nonresidential structures within the county. If development sites are not available, a shortage could influence participation and resettlement decisions made by residents.

2) Voluntary participation could produce an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating

irregular development patterns and weakening community cohesion.

3) Some areas within this subgroup of Zones A and B are ineligible for the Section 202 Program; therefore, parts of some neighborhoods would remain intact. Other parts of the same neighborhood would be eligible and participation in these areas could impact the integrity and cohesiveness of the neighborhood, which are generally well-established. Based upon historic participation rates, it is estimated that of the 308 eligible structures behind the floodwall, 115 structures would participate in the floodproofing program and 129 structures would participate in the acquisition program (24.6 percent of all structures). The remaining structures would not participate.

4) Acquisition would be the only nonstructural measure available to more than half of the eligible structures in the downtown core of Prestonsburg because many structures cannot be floodproofed. Participation in the program could result in the loss of core building stock in the downtown, thus producing an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion. It may be assumed that owners of downtown structures may not participate in the program to avoid negative impacts to their business.

5) Downtown Prestonsburg is the economic, cultural, social and political center of the community. Participation in the acquisition program could have significant impacts to travel patterns, economic activity, community traditions, social institutions and prospects for growth and development.

6) Important regional educational, business, and social institutions occupy downtown structures in Prestonsburg. Participation of these entities in the nonstructural program may affect their accessibility to populations currently being served.

7) Acquisition of structures could negatively impact tax receipts collected by the City of Prestonsburg and Floyd County.

Potential impacts described under Alternative 7 for Zones C, D, E and F and the Community College area if nonstructural flood protection methods were implemented would be the same.

Alternative 4: Downtown Prestonsburg Short Floodwall + Nonstructural Program

The following impacts are possible if the Prestonsburg short floodwall system is implemented:

1) The CWL for the floodwall and levee would not require the acquisition of structures, although, those properties located adjacent the floodwall may be impacted by construction and loss of yard area, and loss of direct access to the river (two structures).

2) The floodwall and levee would protect approximately 298 structures, both residential and nonresidential.

3) Placement of floodwall gate opening along North Lake Drive, around the Community trust Bank building, and along East Dingus Street where none existed previously would introduce a new physical element into the environment and may be a visual intrusion.

4) Regional traffic and economic activity along North Lake Drive and State Highway 114 would be interrupted when high water causes the closure of the floodwall gate, which crosses North Lake Drive at its intersection of State Highway 114. However, it can be assumed that during times of high water, economic activity along the highway may be interrupted anyway.

5) The protected area would be cut off from areas north of the floodwall during times of high water and gate closure. This may interrupt traditional circulation patterns and create access issues, including access to medical services, grocery stores, and schools.

6) Introduction of the floodwall and levee would interrupt historical river access and potential future river access. A floodwall may also create a perception of lost river access for the general public.

7) Construction of the floodwall and levee system may have short-term noise and dust impacts for residents and businesses within downtown Prestonsburg.

8) Property adjacent areas where local streets are raised may have changes in grade between the structure and street.

9) Construction of the floodwall and levee would protect residents, businesses, schools, community services and infrastructure, thus reducing flood hazard risk during a flood event and property damage caused by flooding. It is estimated that the long floodwall would prevent $8 million in flood damages during a 100-year flood event and $40 million in flood damages during a 500-year event.

10) In the event of a flood, the floodwall and levee would reduce cleanup costs, and time and lost days at work or school.

11) Construction of the floodwall and levee system would relieve residents and business owners of the costs of flood insurance.

12) Development restrictions associated with construction in the floodplain would be lifted creating opportunities for new growth, jobs and economic development.

13) The floodwall and levee system would reduce public health and safety risks during and after flood events.

The following impacts are possible if nonstructural flood protection methods are implemented in areas that would be protected by the Prestonsburg short floodwall (a subgroup of Zones A and B):

1) The acquisition of structures could produce a higher demand for new development sites for both residential and nonresidential structures within the county. If development sites are not available, a shortage could influence participation and resettlement decisions made by residents.

2) Voluntary participation could produce an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion.

3) Some areas within downtown Prestonsburg are ineligible for the Section 202 Program; therefore, parts of downtown would remain intact. Other parts of the same neighborhood would be eligible and participation in these areas could impact the integrity and cohesiveness of the neighborhood, which are generally well-established. Based upon historic participation rates, it is estimated that of the 170 eligible structures within this subgroup of Zones A and B, 64 structures would participate in the floodproofing program and 71 structures would participate in the acquisition program (23.8 percent of all structures). The remaining structures would not participate.

4) Acquisition is the only nonstructural measure available to more than half of the eligible structures in the downtown core of Prestonsburg because many structures cannot be floodproofed. Participation in the program could result in the loss of core building stock in the downtown, thus producing an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion. It may be assumed that owners of

downtown structures may not participate in the program to avoid negative impacts to their business.

5) Downtown Prestonsburg is the economic, cultural, social and political center of the community. Participation in the acquisition program could have significant impacts to travel patterns, economic activity, community traditions, social institutions and prospects for growth and development.

6) Important regional educational, business, and social institutions occupy downtown structures in Prestonsburg. Participation of these entities in the nonstructural program may affect their accessibility to populations currently being served.

7) Acquisition of structures could negatively impact tax receipts collected by the City of Prestonsburg and Floyd County.

Potential impacts previously described under Alternative 7 for Zones C, D, E and F, and areas north of downtown within Zones A and B if nonstructural flood protection methods were implemented would be the same.

Alternative 5: Downtown Prestonsburg Short Floodwall + Blackbottom Floodwall + Nonstructural Program

The following impacts are possible if the Blackbottom floodwall is implemented:

1) The CWL for the floodwalls and levee would require the acquisition of two structures, and those properties located adjacent the floodwall may be impacted by construction and loss of yard area (10 structures). Structures located along the river bank may also lose direct access to the river.

2) The floodwalls would protect approximately 406 structures, both residential and nonresidential.

3) Placement of floodwall gate openings along North Lake Drive (two) and University Drive (one) where none existed previously would introduce new physical elements into the environment and may be visual intrusions. Additionally, the floodwalls may impact views from local roads into existing and proposed community shopping areas in the Blackbottom area.

4) Regional traffic and economic activity along North Lake Drive and University Drive would be interrupted when high water causes the closure of the floodwall gates, which cross North Lake Drive near Prestonsburg High School, US Bank and University Drive near the entrance to the retail shopping complex. However, it can be assumed that during times of high water, economic activity in the area may be interrupted anyway.

5) The protected area would be cut off from areas north and south of the floodwalls during times of high water and gate closure. Ingress and egress to the area between the two floodwalls would be restricted during times of gate closure. This may interrupt traditional circulation patterns and create access issues, including access to medical services, grocery stores, schools and community facilities.

6) Introduction of the floodwall and levee would interrupt historical river access and potential future river access. A floodwall may also create a perception of lost river access for the general public.

7) Construction of the floodwall may have short-term noise and dust impacts for residents and businesses within downtown Prestonsburg.

8) Construction of the floodwall would protect residences, businesses, community services, infrastructure and Prestonsburg High School, thus reducing flood hazard risk during a flood event and property damage caused by flooding. It is estimated that the Blackbottom floodwall would prevent $8.1 million in flood damages during a 100-year flood event and $43.1 million in flood damages during a 500-year event.

9) In the event of a flood, the floodwall would reduce cleanup costs, and time and lost days at work or school.

10) Construction of the floodwall would relieve residents and business owners from the costs of flood insurance.

11) Development restrictions associated with construction in the floodplain would be lifted creating opportunities for new growth, jobs and economic development.

12) The floodwall would reduce public health and safety risks during and after flood events.

The following impacts are possible if nonstructural flood protection methods are implemented in areas that would be protected by the short floodwall and the Blackbottom floodwall (a subgroup of Zones A and B):

1) The acquisition of structures could produce a higher demand for new development sites for both residential and nonresidential structures within the county. If development sites are not available, a shortage could influence participation and resettlement decisions made by residents.

2) Voluntary participation could produce an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating

irregular development patterns and weakening community cohesion.

3) Some areas within the Blackbottom neighborhood and downtown Prestonsburg are ineligible for the Section 202 Program; therefore, parts of Blackbottom and downtown would remain intact. Other parts of the same areas would be eligible, and participation in these areas could impact the integrity and cohesiveness of the neighborhood, which are generally well-established. Based upon historic participation rates, it is estimated that of the 233 eligible structures, 87 structures would participate in the floodproofing program and 98 structures would participate in the acquisition program (24.1 percent of all structures). The remaining structures would not participate.

4) Acquisition is the only nonstructural measure available to more than half of the eligible structures in the downtown core of Prestonsburg because many structures cannot be floodproofed. Participation in the program could result in the loss of core building stock in the downtown, thus producing an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion. It may be assumed that owners of downtown structures may not participate in the program to avoid negative impacts to their business.

5) Downtown Prestonsburg is the economic, cultural, social and political center of the community. Participation in the acquisition program could have significant impacts to travel patterns, economic activity, community traditions, social institutions and prospects for growth and development.

6) Important regional educational, business, and social institutions occupy downtown structures in Prestonsburg. Participation of these entities in the nonstructural program may affect their accessibility to populations currently being served.

7) Acquisition of structures could negatively impact tax receipts collected by the City of Prestonsburg and Floyd County.

8) Acquisition of Prestonsburg High School would impact community activity patterns and change community travel patterns.

Potential impacts described under Alternative 7 for Zones C, D, E and F, and areas outside of the Blackbottom neighborhood and downtown within Zones A and B if nonstructural flood protection methods were implemented would be the same.

Alternative 6: Blackbottom Floodwall + Nonstructural Program

The following impacts are possible if the Blackbottom floodwall is implemented:

1) The CWL for the floodwall and levee would require the acquisition of two structures, and those properties located adjacent the floodwall may be impacted by construction and loss of yard area (nine structures). The structures located along the river bank may also lose direct access to the river.

2) The floodwall would protect approximately 108 structures, both residential and nonresidential.

3) Placement of floodwall gate opening along North Lake Drive and University Drive where none existed previously will introduce a new physical element into the environment and may be a visual intrusion. Additionally, the floodwall may impact views from local roads into existing and proposed community shopping areas.

4) Regional traffic and economic activity along North Lake Drive and University Drive would be interrupted when high water causes the closure of the floodwall gates, which cross North Lake Drive near Prestonsburg High School and University Drive near the entrance to the retail complex. However, it can be assumed that during times of high water, economic activity in the area may be interrupted anyway.

5) The protected area would be cut off from areas north and south of the floodwall during times of high water and gate closure. This may interrupt traditional circulation patterns and create access issues, including access to medical services, grocery stores, schools and community facilities.

6) Introduction of the floodwall and levee would interrupt historical river access and potential future river access. A floodwall may also create a perception of lost river access for the general public.

7) Construction of the floodwall may have short-term noise and dust impacts for residents and businesses within downtown Prestonsburg.

8) Construction of the floodwall would protect residences, businesses, community services, infrastructure and Prestonsburg High School, thus reducing flood hazard risk during a flood event and property damage caused by flooding. It is estimated that the Blackbottom floodwall would prevent $104,000 in flood damages during a 100-year flood event and $3.1 million in flood damages during a 500-year event.

9) In the event of a flood, the floodwall would reduce cleanup costs and time, and lost days at work or school.

10) Construction of the floodwall would relieve residents and business owners of the costs of flood insurance. Additionally, the Blackbottom floodwall would protect downtown Prestonsburg to the 1977 flood level.

11) Development restrictions associated with construction in the floodplain would be lifted creating opportunities for new growth, jobs and economic development.

12) The floodwall will reduce public health and safety risks during and after flood events.

The following impacts are possible if nonstructural flood protection methods are implemented in areas that would be protected by the Blackbottom floodwall (a subgroup of Zones A and B):

1) The acquisition of structures could produce a higher demand for new development sites for both residential and nonresidential structures within the county. If development sites are not available, a shortage could influence participation and resettlement decisions by residents.

2) Voluntary participation could produce an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion.

3) Some areas within the Blackbottom neighborhood are ineligible for the Section 202 Program; therefore, parts of Blackbottom would remain intact. Other parts of the neighborhood would be eligible and participation in these areas could impact the integrity and cohesiveness of the neighborhood, which are generally well-established. Based upon historic participation rates, it is estimated that of the 63 eligible structures in the Blackbottom neighborhood, 24 structures would participate in the floodproofing program and 26 structures would participate in the acquisition program (24.1 percent of all structures). The remaining structures would not participate.

4) Acquisition of structures could negatively impact tax receipts collected by the City of Prestonsburg and Floyd County.

5) Acquisition of Prestonsburg High School would impact community activity patterns and change community travel patterns.

Potential impacts described under Alternative 7 for Zones C, D, E and F, and areas outside of the Blackbottom neighborhood within Zones A and B if nonstructural flood protection methods were implemented would be the same.

Alternative 7: Total Nonstructural Program

The following impacts are possible if nonstructural flood protection methods are implemented in areas identified as Zones A and B:

1) The acquisition of structures could produce a higher demand for new development sites for both residential and nonresidential structures within the county. If development sites are not available, a shortage could influence participation and resettlement decisions made by residents.

2) If suitable relocation sites do not exist, the city's population could decline as residents choose to relocate outside of Prestonsburg.

3) Population decline could affect levels of economic development, school enrollment, and services provided by Prestonsburg. A decline in population could produce an overall weakening of the social network within the community. The extent of weakening is based upon participation in the acquisition program.

4) Voluntary participation could produce an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion.

5) Irregular development patterns created by voluntary participation could weaken familial ties and interrupt visitation patterns, which in turn could impact community organizations such as churches, schools and civic organizations.

6) Raise-in-place floodproofing could present a barrier to elderly resident participation. Where all stair alternatives are not feasible, other floodproofing methods should be made available to encourage high participation rates.

7) Some areas within Zones A and B are ineligible for the Section 202 Program; therefore, parts of some neighborhoods would remain intact. Other parts of the same neighborhood would be eligible and participation in these areas could impact the integrity and cohesiveness of the neighborhood, which are generally well-established. Based upon historic participation rates, it is estimated that of the 311 eligible structures within Zones A and B, 116 structures would participate in the floodproofing program and 131 structures would participate in

the acquisition program (20.9 percent of all structures). The remaining structures would not participate.

8) Areas in Zones A and B are more well-defined neighborhoods than other nonstructural areas. Structures are evenly spaced, sidewalks are present, and neighborhoods are well-defined and stable. Participation in the nonstructural program in these areas will have a greater impact on the physical appearance and cohesiveness of these neighborhoods.

9) Participation in the acquisition program within well-defined neighborhoods could reduce the desirability of these neighborhoods as a place to live for current and future residents. As a result, property values may also be affected.

10) Acquisition would be the only nonstructural measure available to more than half of the eligible structures in the downtown core of Prestonsburg because many structures cannot be floodproofed. Participation in the program could result in the loss of core building stock in the downtown, thus producing an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion. It may be assumed that owners of downtown structures may not participate in the program to avoid negative impacts to their business.

11) Downtown Prestonsburg is the economic, cultural, social and political center of the community. Participation in the acquisition program could have significant impacts to travel patterns, economic activity, community traditions, social institutions and prospects for growth and development.

12) Important regional educational, business, and social institutions occupy downtown structures in Prestonsburg. Participation of these entities in the nonstructural program may affect their accessibility to populations currently being served.

13) Participation in the nonstructural program by structures within the mixed use corridor north of State Highway 114 along North Lake Drive and in the Blackbottom neighborhood could weaken the physical fabric and economic cohesiveness of the business corridors.

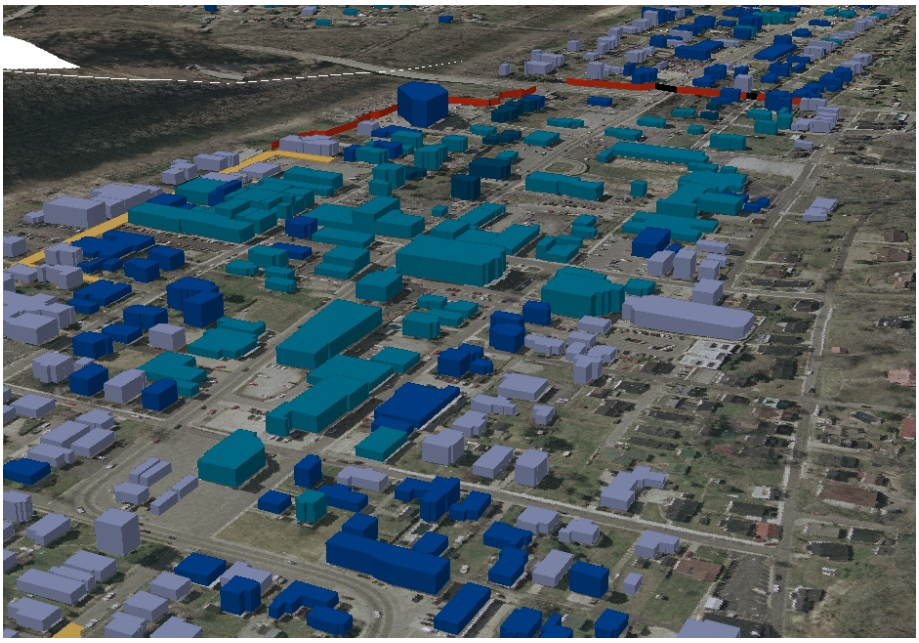
14) Participation by structure identification number LV0126 (retail shopping complex) could change travel and economic activity patterns for populations shopping at stores within the complex.

15) Acquisition of structures could negatively impact tax receipts collected by the City of Prestonsburg and Floyd County.

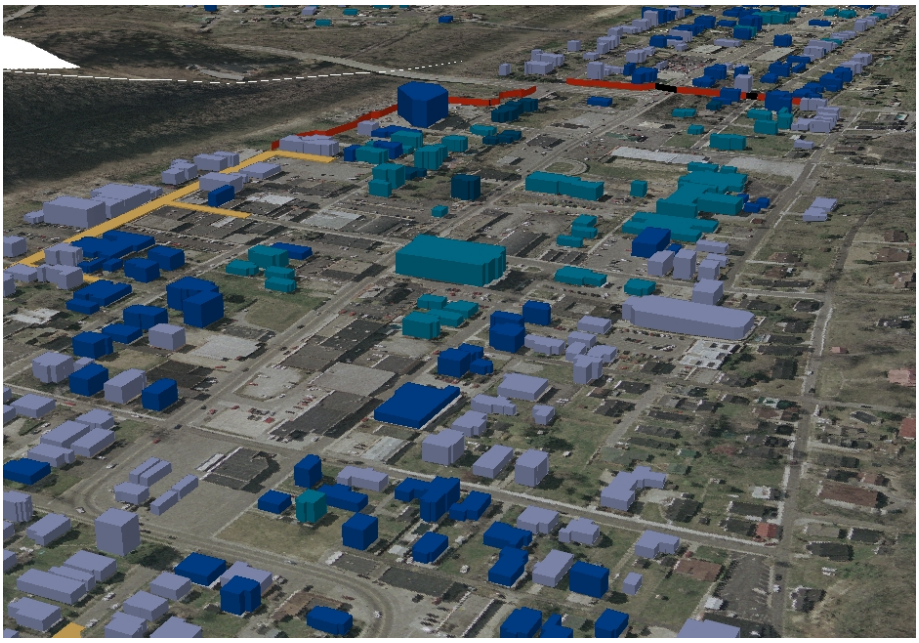
Figure 6: Downtown Prestonsburg Acquisition Impacts: Before and After

A graphic illustration of existing buildings in downtown Prestonsburg.

Structures eligible for the Section 202 Program are shown in dark blue.



A graphic illustration of the potential impact due to acquisition within downtown Prestonsburg.



The following impacts are possible if nonstructural flood protection methods are implemented in areas identified as Zones C, D, E and F:

1) The acquisition of structures could produce a higher demand for new development sites for both residential and nonresidential structures within the county. If development sites are not available within the county, a shortage could influence participation and resettlement decisions made by residents.

2) If suitable relocation sites do not exist, the county's population could decline as residents choose to relocate outside of Floyd County.

3) Population decline could affect levels of economic development, school enrollment, and service provisions by the county and communities. A decline in population could produce an overall weakening of the social network within the county and smaller neighborhood areas in particular. The extent of weakening is based upon participation in the acquisition program.

4) Voluntary participation could produce an unusual pattern of development. Acquisition of a structure results in vacant property; acquisition could occur interspersed with other methods of flood protection or non-participation, thus creating irregular development patterns and weakening community cohesion. Based upon historic participation rates, it is estimated that of the 315 eligible structures outside of Zones A and B, 118 structures would participate in the floodproofing program and 132 structures would participate in the acquisition program (17.6 percent of all structures). The remaining structures would not participate.

5) Acquisition of structures could negatively impact tax receipts collected by the City of Prestonsburg and Floyd County.

6) Irregular development patterns created by voluntary participation could weaken familial ties and interrupt visitation patterns, which in turn could impact community organizations such as churches, schools and civic organizations.

7) If raise-in-place is the only method available for floodproofing, it could present a barrier to the elderly participating in this program because of concerns expressed in neighboring counties with similar situations about being able to climb stairs. Other alternatives to stairs include: ramps; chairlifts; and elevators. For many people chairlifts are undesirable and elevators are cost prohibitive. The third method, ramps, may require more horizontal area than is available on small lots. Where all stair alternatives are not feasible, other floodproofing methods should be made available to encourage high participation rates.

APPENDIX A: SOCIO-ECONOMIC ANALYSIS

Table of Contents

Figures and Tables

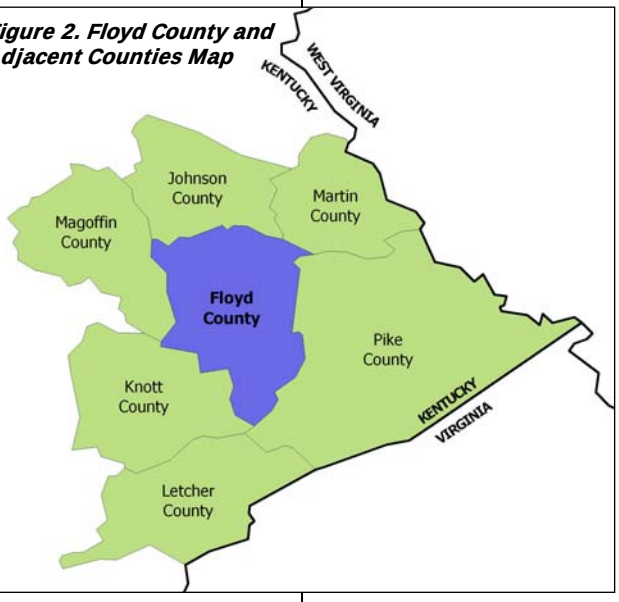
I. Description of the Area

Floyd County (Figure 1) was formed in 1800 and named for Colonel John Floyd, an explorer and surveyor. It is located in the Eastern Coal Field region of Kentucky. The elevation in the county ranges from 580 to 2,320 feet above sea level. In 2000, a county population of 42,441 occupied a land area of 394.29 square miles, which equates to an average of 107.6 people per square mile. The county seat is Prestonsburg.

Figure 1. Floyd County Location Map

The six counties that surround Floyd County include: Pike, Knott, Letcher, Johnson, Magoffin and Martin Counties in Kentucky. These six counties will be referenced throughout this report for comparison purposes (Figure 2).

Figure 2. Floyd County and Adjacent Counties Map



Floyd County, located in Eastern Kentucky, part of the Eastern Coal Field region of the state. The county seat, Prestonsburg, is located on the Levisa Fork of the Big Sandy River. It was founded in 1797 and was originally known as Preston's Station, for Colonel John Preston. It was renamed Prestonsburg in 1799 when it became the seat of the newly formed Floyd County. The population of Prestonsburg in 2000 was 3,558 persons. Other communities in Floyd County include: Allen, Beaver, Betsy Layne, Drift, Estill, Garrett, Harold, Laynesville, Martin, Melvin, and Wheelwright.

II. Climate

The climate in eastern Kentucky consists of warm summers and moderately cold winters. Climate data was gathered from the U.S. Department of Commerce, National Climatic Data Center. The closest weather station to Floyd County is located in Jackson, Breathitt County, Kentucky.

Between 1971 and 2000, the average annual temperature was approximately 55 degrees Fahrenheit. Floyd County experiences, on average, approximately 49 inches of precipitation annually. The growing season typically lasts from late March until early October (base 32 degrees Fahrenheit).

III. Population

TABLE 1. Historical Population Data
FLOYD COUNTY

YEAR	POPULATION	% CHANGE
1900	15,552	
1910	18,623	19.7%
1920	27,427	47.3%
1930	41,942	52.9%
1940	52,986	26.3%
1950	53,500	1.0%
1960	41,642	-22.2%
1970	35,889	-13.8%
1980	48,764	35.9%
1990	43,586	-10.6%
2000	42,441	-2.6%

US Census Bureau, 1900 - 2000 Decennial Censuses.

TABLE 2. Population Projections
FLOYD COUNTY

YEAR	POPULATION	% CHANGE
1990	43,586	
1995	43,558	-0.1%
2000	42,441	-2.6%
2005	42,032	-1.0%
2010	41,367	-1.6%
2015	40,402	-2.3%
2020	39,067	-3.3%
2025	37,430	-4.2%
2030	35,509	-5.1%

US Census Bureau, 1990 - 2000 Decennial Censuses and 1995 Estimate, Kentucky State Data Center 2005 - 2030 Population Projections (Middle Series) August 5, 2003.

Population in Floyd County increased steadily until the middle of the 20th century. In 1900, Floyd County's population was 15,552. Growth in the coal mining economy resulted in a population boom between 1910 and 1930, when the population more than doubled, rapidly increasing from 18,623 to 41,842. Floyd County's population continued growing until 1950 when it reached 53,500 persons (Table 1).

Since 1950, the population of Floyd County has fluctuated and the county has experienced, on average, a decline of 0.4 percent annually. An exception to this pattern occurred during the 1970s when Floyd County experienced an increase in population along with other counties in the region. This increase was due in part to the increased demand for coal and the limited international supply of oil. The OPEC crisis and oil embargo of 1973 drove energy prices up and forced the nation to seek alternative energy sources, including coal. However, since 1980, the population has continued to decline.

Based upon historical population data, the Kentucky State Data Center (KSDC) prepares population projections for each of Kentucky's 120 counties throughout the Commonwealth. KSDC projects Floyd County's population will continue on a steady decline, and by 2030 the population will be less than 36,000. The projected 2030 population is comparable to Floyd County's population in 1970 (Table 2). Between 2000 and 2030 it is anticipated that the population will decrease 16.3 percent.

TABLE 3. 1990 - 2000 Population Change

FLOYD COUNTY and CENSUS DESIGNATED PLACES

PLACE	1990 POPULATION	2000 POPULATION	% CHANGE
FLOYD COUNTY	43,586	42,441	-2.6%
Prestonburg	3,612	3,558	-1.5%
Wheelwright	1,042	733	-29.7%
Martin	633	705	11.4%
Rest of County	38,299	37,445	-2.2%

US Census Bureau, 1990 - 2000 Decennial Censuses.

Many municipalities within Floyd County experienced population declines between 1990 and 2000. As noted in Table 3, Prestonsburg and Wheelwright experienced 1.5 and 29.7 percent decreases in population, respectively. The City of Martin was an exception; the city experienced an 11.4 percent increase in population between 1990 and 2000.

TABLE 4. 1990 - 2000 Population Characteristics

FLOYD COUNTY

CHARACTERISTICS	1990	2000
Population	43,586	42,441
AGE		
Under 18 years	28.7%	23.6%
65 years and over	7.9%	12.2%
Median age (years)	32.1	36.7
SEX		
Male	48.9%	49.2%
Female	51.1%	50.8%
RACE		
One Race	**---**	***99.6%***
White	99.2%	97.7%
Black or African American	0.6%	1.3%
American Indian and Alaska Native	0.0%	0.1%
Asian	0.1%	0.2%
Native Hawaiian and Other Pacific Islander	0.0%	0.1%
Some other race	0.0%	0.1%
Two or More races	**---**	***0.4%***
Hispanic or Latino Origin		
Hispanic or Latino (of any race)	0.2%	0.6%
Not Hispanic or Latino	99.8%	99.4%

US Census Bureau, 1990 - 2000 Decennial Censuses.

The median age in Floyd County increased from 32.1 years to 36.7 years between 1990 and 2000 (Table 4). Much of this increase can be attributed to the out-migration of youth and low levels of natural population increases. As a community's median age climbs, special social and economic issues become apparent, such as a smaller labor force, greater demands on medical and transportation facilities, and demand for varied types of housing.

Between 1990 and 2000, Floyd County's overall population declined 2.6 percent. There has been a slight change in gender distribution, with a slight increase in the male population (Table 4). There has also been small growth in minority races. As of 2000, minority races accounted for 2.3 percent of the county's population. It should be noted that the 2000 Census allowed people to choose more than one racial category, an option that was not available for previous censuses.

The percentage of Hispanic or Latino origin residents in Floyd County grew from 0.2 percent to 0.6 percent during the 1990s.

Population characteristics in Eastern Kentucky counties are fairly similar and consistent with state population characteristics. The most notable characteristic difference is in the race category. The Commonwealth of Kentucky has a 9.9 percent minority population, while the minority population for Floyd County is approximately two percent and is less than one percent for the adjoining counties collectively (Table 5). Median age in Floyd County was 36.7, which was similar to the six surrounding counties and Kentucky (35.9).

TABLE 5. 2000 Population Characteristics

FLOYD COUNTY COMPARED to ADJACENT COUNTIES and the COMMONWEALTH OF KENTUCKY

CHARACTERISTICS	Floyd County	Adjacent Counties	Kentucky	Johnson County	Knott County	Letcher County	Magoffin County	Martin County	Pike County
AGE									
Under 18 years	23.6%	24.4%	24.6%	24.0%	24.5%	23.7%	26.8%	28.1%	23.7%
65 years and over	12.2%	11.9%	12.5%	12.6%	11.4%	12.6%	10.6%	9.7%	12.3%
Median age (years)	36.7	---*	35.9	37.4	35.9	37.9	34.3	34.1	37.1
SEX									
Male	49.2%	48.9%	48.9%	48.2%	49.3%	48.9%	49.3%	49.5%	48.8%
Female	50.8%	51.1%	51.1%	58.1%	50.7%	51.1%	50.7%	50.5%	51.2%
RACE									
One race	***99.6%***	***99.5%***	***98.9%***	***99.4%***	***99.4%***	***99.6%***	***99.7%***	***99.5%***	***99.4%***
White	97.7%	98.6%	90.1%	98.6%	98.3%	98.7%	99.3%	99.3%	98.3%
Black or African American	1.3%	0.4%	7.3%	0.3%	0.7%	0.5%	0.2%	0.0%	0.5%
American Indian and Alaska Native	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%
Asian	0.2%	0.3%	0.7%	0.3%	0.2%	3.0%	0.1%	0.1%	0.4%
Native Hawaiian and Other Pacific Islander	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Some other race	0.1%	0.1%	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
Two or more races	***0.4%***	***0.5%***	***1.1%***	***0.6%***	***0.6%***	***0.5%***	***0.3%***	***0.3%***	***0.6%***
HISPANIC OR LATINO AND RACE									
Hispanic or Latino (of any race)	0.6%	0.6%	1.5%	0.6%	0.6%	0.4%	0.4%	0.6%	0.7%
Not Hispanic or Latino	99.4%	99.4%	98.5%	99.4%	99.4%	99.6%	99.6%	99.4%	99.3%

US Census Bureau, 2000 Decennial Censuses.

* Median Age cannot be calculated for all adjacent counties as a whole because individual data is not available.

Note: Adjacent Counties data is an average of all six adjacent counties, including Johnson, Knott, Letcher, Magoffin and Pike Counties.

IV. Housing, Households and Families

The number of housing units in Floyd County increased 8.6 percent between 1990 and 2000, rising from 17,169 units to 18,551 units (Table 6). Of the 2000 figure, 69.4 percent were owner-occupied and 21.6 percent were occupied by renters. Nine percent of the total units in 2000 were vacant, which is similar to the 1990 figure of 8.8 percent. Between 1990 and 2000 a total of 3,748 new housing units were built, similar to the amount constructed in the 1970s (3,776) and 1980s (3,734).

During the 1990s, 2,366 structures were demolished or destroyed. As a result, a net gain in the total number of housing units was realized. A net gain in housing units and a decline in population produced a slight increase in the number of vacant buildings and vacancy rate. By comparison, Kentucky as a whole experienced a 9.2 percent vacancy rate, while the United States experienced a 9.0 percent vacancy rate.

TABLE 6. 1990 and 2000 Housing Characteristics
FLOYD COUNTY

CHARACTERISTICS	1990		2000	
	NUMBER	PERCENT	NUMBER	PERCENT
Housing Units	**17,169**		**18,551**	
Owner Occupied	11,693	68.1%	12,872	69.4%
Renter Occupied	3,971	23.1%	4,009	21.6%
Vacant	1,505	8.8%	1,670	9.0%
Built 1990 to March 2000	---[1]	---[1]	3,748	20.2%
Built 1980 to 1989	4,416	25.7%	4,069	21.9%
Built 1970 to 1979	4,786	27.9%	4,069	21.9%
Built 1960 to 1969	1,979	11.5%	2,058	11.1%
Built 1940 to 1959	3,844	22.4%	2,954	15.9%
Built 1939 or Earlier	2,144	12.5%	1,653	8.9%
Median Value (Occupied)	$ 37,800		$ 53,100	
Households	**15,629**		**16,881**	
Average Household Size	2.80		2.45	
Household Types				
Family Households	***12,423***	***79.5%***	***12,267***	***72.7%***
Married Couple Family	10,278	65.8%	9,537	56.5%
Female-Headed Family[2]	2,045	13.1%	2,078	12.3%
Male-Headed Family[3]	978	6.3%	652	3.9%
Average Family Size	3.18		2.93	
Nonfamily Households	***3,206***	***20.5%***	***4,614***	***27.3%***
Living Alone	3,023	19.3%	4,256	25.2%
Two or More Residents	183	1.2%	358	2.1%

US Census Bureau, 1990 and 2000 Decennial Censuses

[1] 1990 Data reflects building construction of housing units through March 1989.

[2] No Husband Present

[3] No Wife Present

Homeownership and vacancy rates increased in Floyd County during the 1990s, as did the median value of occupied structures, while the percentage of rental-occupied units declined during the same period. Changes in the housing mixture can become cause for concern if persons searching for affordable housing units are unable to locate any. An increasing number and percentage of vacant units may indicate an adequate pool of potential residences for purchase or rent, although they may not necessarily be considered affordable to lower income residents or safe and sanitary.

The housing stock in Floyd County is aging. In 1990, 53.6 percent of structures were 20 years old or newer (built since 1970). In 2000, that percentage declined to 42.1 percent (built since 1980).

The U.S. Census Bureau defines a household as a single housing unit and those persons which occupy the unit. A family household is defined as a household where persons related by birth, marriage, and adoption reside. In 2000, Floyd County was comprised of 16,881 households, of which 72.7 percent (12,267) are family households (Table 6). The remaining 27.3 percent (4,614 households) are considered non-family households and may consist of individuals living alone, or two or more persons living together who are not related by birth, marriage, or adoption.

In 2000, the average household size was 2.45 persons per household and 2.93 persons per family. Average household and family size in Floyd County has declined since 1990. While the number of households increased between 1990 and 2000, the percentage of family households declined from 79.5 percent to 72.7 percent. Fewer married-couple and male-headed families were present, although female-headed families increased slightly in total number. Gains in single-parent households, especially female-headed households with no husband present, may contribute to higher poverty rates and often put a strain on local social programs.

When compared to adjacent counties, Floyd County's housing characteristics are similar in terms of household types, and occupancy and vacancy rates (Table 7). When compared to adjacent counties, Floyd County's median value of occupied structures ranks in the middle; four counties have higher median values and two have lower median values. In comparison, Kentucky's median value of $86,700 significantly exceeds that of the county. The United States' median value is more than twice as high ($119,600) compared to Floyd County.

Between 1990 and 2000, a total of 3,518 housing units were constructed in Floyd County, which represents a rate of new construction similar to adjacent counties. Floyd County's housing stock is similar in age to that of adjacent counties, but it comparatively newer than the rest of the state. A total of 42.1 percent of housing units were built in the county between 1980 and 2000, by comparison, 42.4 percent of the existing housing units in adjacent counties and 36.0 percent of the housing units within the state were built during the same time period.

TABLE 7. 2000 Housing Characteristics

FLOYD COUNTY COMPARED to ADJACENT COUNTIES and the COMMONWEALTH OF KENTUCKY

CHARACTERISTICS	Floyd County	Adjacent Counties	Kentucky	Johnson County	Knott County	Letcher County	Magoffin County	Martin County	Pike County
Total Housing Units	**18,551**	**71,141**	**1,750,927**	**10,236**	**7,579**	**11,405**	**5,447**	**5,551**	**30,923**
Owner Occupied	69.4%	70.4%	64.3%	67.9%	70.5%	71.5%	75.6%	68.3%	70.3%
Renter Occupied	21.6%	18.6%	26.6%	21.0%	18.1%	16.9%	16.6%	17.8%	19.0%
Vacant	9.0%	11.0%	9.2%	11.1%	11.4%	11.6%	7.8%	14.0%	10.7%
Built 1990 to March 2000	20.2%	22.1%	21.2%	20.1%	21.7%	21.1%	23.9%	24.6%	22.6%
Built 1980 to 1989	21.9%	20.3%	14.8%	17.3%	21.8%	14.7%	21.0%	24.4%	22.1%
Built 1970 to 1979	21.9%	25.0%	20.0%	23.9%	25.0%	22.5%	26.2%	29.9%	25.3%
Built 1960 to 1969	11.1%	9.3%	13.7%	11.3%	9.8%	8.8%	10.2%	7.4%	8.9%
Built 1940 to 1959	15.9%	13.8%	18.0%	15.2%	14.8%	16.9%	11.4%	8.4%	13.4%
Built 1939 or Earlier	8.9%	9.4%	12.4%	12.2%	6.8%	16.1%	7.3%	5.4%	7.7%
Median Value (Occupied)	$ 53,100	---[1]	$ 86,700	$ 64,700	$ 46,500	$ 39,500	$ 55,600	$ 62,100	$ 65,900
Total Households	**16,881**	**63,317**	**1,590,647**	**9,103**	**6,717**	**10,085**	**5,024**	**4,776**	**27,612**
Average Size	2.45	2.54	2.47	2.52	2.54	2.48	2.62	2.62	2.46
Household Types									
Family Households	***72.7%***	***74.5%***	***69.4%***	***75.4%***	***74.3%***	***74.0%***	***76.8%***	***75.8%***	***73.8%***
Married Couple Family	56.5%	59.1%	53.9%	60.5%	57.6%	58.4%	61.9%	59.5%	58.8%
Female-Headed Family[2]	12.3%	11.6%	11.8%	10.3%	12.6%	11.5%	12.4%	12.5%	11.4%
Male-Headed Family[3]	3.9%	3.7%	3.7%	3.3%	4.1%	4.0%	4.9%	3.8%	3.6%
Average Family Size	2.93	---[1]	2.97	2.93	3.00	2.94	3.04	3.05	2.90
Nonfamily Households	***27.3%***	***25.5%***	***30.6%***	***24.6%***	***25.7%***	***26.0%***	***23.2%***	***24.2%***	***26.2%***
Living Alone	25.2%	23.4%	26.0%	22.3%	23.6%	24.1%	21.4%	21.8%	24.1%
Two or More Residents	2.1%	2.1%	4.5%	2.0%	2.1%	2.0%	1.6%	2.4%	2.1%

US Census Bureau, 2000 Decennial Censuses

[1] Cannot be calculated for all adjacent counties as a whole because individual data is not available.

[2] No Husband Present

[3] No Wife Present

Note: Adjacent Counties data is an average of all six adjacent counties, including Johnson, Knott, Letcher, Magoffin and Pike Counties.

V. Transportation, Public Utilities and Communications

Major highways serving Floyd County include: US Route 23 and State Routes 114 and 80. The Mountain Parkway (Salyersville) and the Daniel Boone Parkway (intersection of State Route 80 and State Route 15 in Perry County) are within a one hour drive of the county. These two parkways provide connections to the I-75 north-south and I-64 east-west corridors in Kentucky. In addition, US Route 23 connects with US Route 119 in Pike County which provides access to southern West Virginia.

Commuting data gathered by the U.S. Census Bureau shows that 94.7 percent of Floyd County residents drove to work in 2000, either alone or by carpooling, as compared to the state percentage of 92.9 A small percentage of residents used public transportation (0.2 percent), walked (2.1 percent), or worked at home (2.3 percent).

CSX Transportation and R.J. Corman Railroad Company provide freight rail services in Floyd County. In 1999, a majority of freight originating in Kentucky was coal (88 percent of 95.5 million tons), and it can be assumed the same is true of Floyd County.

Floyd County is served by three airports located in Pike County to the east, Martin County to the northeast and Johnson County to the north. The Pike County Airport-Hatcher Field is six miles northwest of Pikeville and is accessible from US Route 23. The airport has two runways, one in good and one in fair condition. The Big Sandy Regional Airport is located nine miles northeast of Prestonsburg in Martin County. The airport has two runways, both in fair condition. The Paintsville-Prestonsburg-Combs Field Airport is located just across the county line in Johnson County, four miles southeast of Paintsville. The airport has two runways, both in good condition. The closest commercial airport to Floyd County is located to the northeast outside of Huntington, West Virginia.

Utility services in Floyd County are managed and distributed by several private operations in conjunction with community operated services. Electric power is provided by American Electric Power (AEP) and Big Sandy RECC. The majority of Floyd County's telephone service is provided by Bell South. Coalfields Telephone Company serves a small area in Floyd County along the Floyd-Pike county line.

Natural gas is distributed Columbia Gas of Kentucky, Inc.; Auxier Road Gas Co.; B & H Gas Co.; Cow Creek Gas Co.; East Kentucky Utilities, Inc.; Martin Gas, Inc.; Mike Little Gas Co., Inc.; Slick Rock Gas Co.; and Equitable Gas Co. Water districts serving the county

include Sandy Valley Water District, Southern Water District (formerly Mud Creek and Beaver Elkhorn Water Districts) and Magoffin County Water District. Other water service is provided by Auxier Water Company, Inc., Francis Water Company, Martin Water Works, Prestonsburg City Utilities and Wheelwright Utilities.

Wastewater treatment is provided by Southern Water District – Sewer Division, Mountain Water District – Sewer Division, City of Martin, Wheelwright Utilities and Prestonsburg City Utilities.

VI. Education

The Floyd County School District provides public education to county residents. The school system consists of four high schools, three middle schools, and nine elementary schools. In addition, there is one alternative school, Opportunities Unlimited Alternative School, which is located in Martin. Total enrollment during the 2002-2003 school-year was 6,827 students. During the same school year, over 576 full-time teachers were employed by the school. The Floyd County School District offers programs for gifted and talented and special education students, as well as programs in adult education and family literacy. There are four private schools in Floyd County.

One community college, Prestonsburg Community College, is located in Floyd County. The University of Kentucky Community College System was authorized by the General Assembly in 1962 and formed in 1964. In 1999 the Community Colleges and the state's technical schools were placed under the newly formed Kentucky Community and Technical College System. Prestonsburg Community College is part of the Big Sandy Community and Technical College System.

Floyd County residents are within driving distance of several other colleges and universities located outside of the county. These include Pikeville College, the Appalachian School of Law, University of Kentucky, Morehead State University, King College, Virginia Intermont College, East Tennessee State University, Emory and Henry College, Radford University, University of Virginia at Wise, Marshall University, and the University of Charleston.

TABLE 8. 1990 and 2000 Educational Attainment
FLOYD COUNTY COMPARED to ADJACENT COUNTIES and the COMMONWEALTH of KENTUCKY

PLACE	Percent Completing High School		Percent Completing Four or More Years of College	
	1990	2000	1990	2000
FLOYD COUNTY	50.8%	61.3%	7.4%	9.7%
ADJACENT COUNTIES	48.2%	59.7%	7.5%	9.2%
KENTUCKY	64.6%	74.1%	13.6%	17.1%
JOHNSON COUNTY	54.7%	63.8%	9.3%	9.3%
KNOTT COUNTY	45.1%	58.7%	8.2%	10.2%
LETCHER COUNTY	45.6%	58.5%	6.7%	7.7%
MAGOFFIN COUNTY	38.2%	50.1%	4.6%	6.3%
MARTIN COUNTY	44.4%	54.0%	6.0%	9.0%
PIKE COUNTY	50.2%	61.8%	7.7%	9.9%

US Census Bureau, 1990 and 2000 Decennial Censuses.
Educational attainment is shown for population 25 years of age and older.

In 2000, of the population in Floyd County over the age of 25 years, 61.3 percent had obtained a high school diploma, while 9.7 percent had graduated from college with a Bachelor's degree or higher (Table 8). Both rates are improvements in educational attainment since 1990. While Floyd County boasts higher educational attainment than many of its neighboring counties, the county was significantly lower when compared to the Commonwealth of Kentucky, as a whole. Lower

educational attainment levels than the state may reflect a smaller percentage of young adults in the county. Many young adults may be leaving Floyd County to obtain post-secondary education degrees and employment elsewhere.

VII. Recreation and Other Public Facilities

In October 1996, the Mountain Arts Center hosted its grand opening, enriching the music and cultural fabric of Eastern Kentucky. The facility, located in Prestonsburg, houses a 1,050 seat theater, several large meeting rooms, a commercial recording studio, art gallery, and gift shop. The Mountain Arts Center has established a reputation throughout the region for presenting family entertainment. The Center has hosted performances by major country and bluegrass entertainers, rock and roll and gospel artists, family theater, and big bands. The Jenny Wiley Amphitheatre, in its 40th year of operation, hosts plays and musicals in an outdoor setting within the Jenny Wiley State Resort Park.

Recreational opportunities are available for Floyd County residents locally as well as regionally. Several county parks offer a variety of recreation facilities throughout the county, including children's playgrounds, baseball fields, basketball and tennis courts, picnic areas, swimming pools, golf courses and river access points. Prestonsburg's Archer Park offers indoor ice skating, a public swimming pool, tennis and basketball courts, baseball fields and playgrounds. The park also had an indoor gymnasium, racquetball courts, an historic caboose, and a war memorial. As is common in the region, Floyd County has a number of miles of scenic viewsheds, wildlife habitat, and natural forestland.

Floyd County residents have access to regional recreational opportunities in three states. Recreation areas within 50 miles include:, Dewey Lake Wildlife Management Area, Jenny Wiley State Resort Park, Pine Mountain Trail State Park, Fishtrap Lake and Wildlife Management Area Breaks Interstate Park, and Laurel Lake Wildlife Management Area. These regional recreation sites collectively offer hunting, fishing, camping, hiking, boating, golf, and lodging.

The Floyd County Public Library is centrally located in downtown Prestonsburg.

VIII. Local Economy, Labor Force and Employment

Floyd County's economy is distributed throughout several employment categories. Education, health, and social services employ a significant percentage of people (22.8 percent), while retail trade (16.0 percent) is also a strong employment sector in Floyd County (Table 9). Prestonsburg's local economy differs slightly from the county. Industries typically identified with incorporated jurisdictions, such as information (4.0 percent); finance, insurance, real estate and rental/leasing (9.7 percent); professional scientific, management, administrative and waste management service (9.5 percent); and educational, health and social services (31.1 percent) hold larger shares of the local economy within Prestonsburg when compared to the county.

TABLE 9. 2000 Employment by Industry

FLOYD COUNTY and PRESTONSBURG

	FLOYD COUNTY		PRESTONSBURG	
INDUSTRY	**NUMBER**	**PERCENT**	**NUMBER**	**PERCENT**
Agricultural, Fishing, Forestry, Hunting & Mining	701	8.5%	41	3.8%
Construction	669	8.1%	45	4.1%
Manufacturing	506	6.2%	35	3.2%
Wholesale Trade	175	2.1%	18	1.7%
Retail Trade	1,314	16.0%	140	12.9%
Transportation, Warehousing & Utilities	432	5.3%	59	5.4%
Information	216	2.6%	44	4.0%
Finance, Insurance, Real Estate & Rental/Leasing	380	4.6%	105	9.7%
Professional, Scientific, Management, Administrative & Waste Management Services	491	6.0%	103	9.5%
Educational, Health & Social Services	1,870	22.8%	338	31.1%
Arts, Entertainment, Recreation, Accommodation & Food Services	612	7.5%	73	6.7%
Other Services (Except Public Administration)	412	5.0%	45	4.1%
Public Administration	433	5.3%	41	3.8%
TOTAL	**8,211**	**100%**	**1,087**	**100%**

U.S. Census Bureau, 2000 Decennial Census.

The U.S. Census Bureau defines an establishment as a single physical location at which business is conducted or services or industrial operations are performed; an establishment is not necessarily a company or enterprise, which may consist of one or more

Table 10. Total Establishments by Industry
FLOYD COUNTY

INDUSTRY	1998	1999	2000	2001
Forestry, Fishing, Hunting, & Agriculture Support	0	1	1	1
Mining	51	43	42	43
Utilities	12	13	13	11
Construction	54	58	52	58
Manufacturing	19	16	16	17
Wholesale Trade	54	56	53	55
Retail Trade	190	180	180	173
Transportation & Warehousing	63	60	57	53
Information	17	17	13	15
Finance & Insurance	38	39	41	37
Real Estate, Rental & Leasing	30	33	30	28
Professional, Scientific & Technical Services	68	62	60	65
Management of Companies & Enterprises	7	5	2	1
Admin, Support, Waste Management, & Remediation Services	28	21	23	22
Educational Services	3	2	2	4
Health Care & Social Assistance	113	109	109	108
Arts, Entertainment & Recreation	8	6	6	7
Accommodation & Food Services	46	47	45	47
Other Services (Except Public Administration)	66	69	69	70
Auxiliaries	1	1	1	1
Unclassified establishments	9	12	14	10
Total Establishments	**877**	**850**	**829**	**826**

U.S. Census Bureau, County Business Patterns Data, 1998 through 2001.

Table 11. Total Establishments by Industry
PRESTONSBURG

INDUSTRY	1998	1999	2000	2001
Forestry, Fishing, Hunting, & Agriculture Support	1	1	0	0
Mining	13	10	10	13
Utilities	7	7	6	5
Construction	20	21	17	19
Manufacturing	4	4	4	5
Wholesale Trade	21	24	21	21
Retail Trade	79	75	80	75
Transportation & Warehousing	20	18	14	12
Information	14	13	9	10
Finance & Insurance	27	24	26	23
Real Estate, Rental & Leasing	21	21	20	19
Professional, Scientific & Technical Services	53	47	43	48
Management of Companies & Enterprises	6	4	1	1
Admin, Support, Waste Management & Remediation Services	12	11	13	12
Educational Services	1	0	0	2
Health Care & Social Assistance	67	67	67	66
Arts, Entertainment & Recreation	6	6	6	6
Accommodation & Food Services	23	26	24	28
Other Services (Except Public Administration)	37	39	36	40
Auxiliaries	2	2	2	2
Unclassified Establishments	5	6	7	6
Total Establishments	**439**	**426**	**406**	**413**

U.S. Census Bureau, Zip Code Business Patterns Data, 1998 through 2001.

establishments. In 2001, 173 retail trade establishments operated in Floyd County, compared to 108 healthcare and social assistance establishments and 58 construction establishments (Table 10). The following industries also operated a large number of establishments within the county in 2001: other services (70); professional, scientific, and technical services (65); transportation and warehousing (53); and accommodation and food services (47).

In Prestonsburg, retail establishments (75); health care and social assistance (66); professional, scientific and technical services (48); and other services (40) operated the most establishments (Table 11).

Overall, the total number of establishments has declined for both Floyd County and Prestonsburg between 1998 and 2001.

Major employers in Prestonsburg include Floyd County Schools, Action Petroleum Group, Quaker Coal Company, Wal-Mart Associates, Appalachian Regional Healthcare, Prestonsburg Community College, Kentucky Oil and Refining Company, R & S Truck Body Company, Floyd County, Riverview Health Care and the City of Prestonsburg (Big Sandy Area Development District, 2002).

Other major employers within the county include Highlands Hospital Corporation, Mountain Comprehensive Care Center, Our Lady of the Way Hospital and Otter Creek Correctional Facility.

Table 12. Total Annual Payroll by Industry in Thousands of Dollars
FLOYD COUNTY

INDUSTRY	1998	1999	2000	2001
Mining	22.7%	12.8%	20.7%	19.9%
Health Care & Social Assistance	20.9%	20.7%	21.4%	22.0%
Retail trade	9.4%	10.4%	11.1%	10.5%
Total Payroll	248,816	237,337	231,834	246,634

US Census Bureau, County Business Patterns Data, 1998 through 2001.

The total annual payroll for coal mining establishments and healthcare and social assistance establishments remains a relatively large percentage of total annual payrolls for all establishments in Floyd County (Table 12). Coal mining establishments accounted for 19.9 percent of all total annual payrolls for the county. Healthcare and social assistance accounted for 22.0 percent of all total annual payrolls for Floyd County. In 2001, total annual payroll for Prestonsburg was approximately $142 million, 57.7 percent of Floyd County's total annual payroll the same year.

Of Floyd County's total population over 16 years of age (33,750), 41.4 percent were considered part of the county's labor force in the year 2000 (Table 13). The U.S. Census Bureau breaks the labor force into three categories: 1) employed in the civilian labor force, 2) employed in the armed forces, and 3) unemployed. The civilian labor force is made up of those people who are: 1) working for pay, 2) working for a family enterprise without pay, 3) working, but temporarily absent from work for reasons such as vacation, illness, weather conditions, labor-management dispute, etc., and 4) not working, but actively looking for employment.

Table 13. 1990 and 2000 Employment Characteristics
FLOYD COUNTY and PRESTONSBURG

	FLOYD COUNTY		PRESTONSBURG	
CHARACTERISTICS	**1990**	**2000**	**1990**	**2000**
Total Population Over 16 Years	**32,565**	**33,750**	**2,917**	**2,953**
Labor Force	***44.9%***	***41.4%***	***40.9%***	***41.1%***
Employed in the Civilian Labor Force	39.2%	37.2%	37.2%	36.8%
Employed in the Armed Forces	0.1%	0.0%	0.1%	0.1%
Unemployed	5.7%	4.2%	3.5%	4.2%
Not in the Labor Force	***55.1%***	***58.6%***	***59.1%***	***58.9%***

US Census Bureau, 1990 and 2000 Decennial Censuses

In 2000, 37.2 percent of the total population over 16 years of age were employed in the civilian labor force, less than one-tenth of one percent were employed in the armed forces (3 individuals), and 4.2 percent were unemployed. The remaining 58.6 percent of Floyd County's population over 16 years of age were not part of the labor force either by choice or circumstance. Many are still in school and others choose to remain unemployed. By comparison, 41.1 percent

of Prestonsburg's population, 44.3 percent of all adjacent counties and 60.9 percent of the Commonwealth of Kentucky are part of the labor force (Tables 13 and 14).

While Floyd County's labor force increase in number, the percentage of the population that is considered part of the labor force declined by 3.5 percent from 44.9 percent to 41.4 percent. The decline may be attributed to retirement, fewer students working, and/or higher levels of transfer payments to county residents. Transfer payments include

Table 14. 2000 Employment Characteristics

FLOYD COUNTY COMPARED to ADJACENT COUNTIES and the COMMONWEALTH OF KENTUCKY

CHARACTERISTICS	Floyd County	Adjacent Counties	Kentucky	Johnson County	Knott County	Letcher County	Magoffin County	Martin County	Pike County
Total Population Over 16 Years	**33,750**	**126,900**	**3,161,542**	**18,543**	**13,933**	**20,112**	**10,212**	**9,522**	**54,578**
Labor Force	***41.4%***	***44.3%***	***60.9%***	***48.4%***	***43.8%***	***43.4%***	***43.4%***	***37.4%***	***44.8%***
Employed in the Civilian Labor Force	37.2%	39.7%	56.9%	44.3%	36.9%	38.6%	37.9%	32.6%	40.7%
Employed in the Armed Forces	0.0%	0.0%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Unemployed	4.2%	4.6%	3.5%	4.1%	6.8%	4.8%	5.5%	4.8%	4.0%
Not in the Labor Force	***58.6%***	***55.7%***	***39.1%***	***51.6%***	***56.2%***	***56.6%***	***56.6%***	***62.6%***	***55.2%***

US Census Bureau, 2000 Decennial Census.

Note: Adjacent Counties data is an average of all six adjacent counties, including Johnson, Knott, Letcher, Magoffin and Pike Counties.

the following forms of income: social security, Medicaid, Medicare, supplemental security income, veteran's benefits, unemployment insurance, food stamps, and family assistance. Transfer payments increased 87.9 percent between 1990 and 2000.

A true unemployment rate is calculated using the total number of unemployed persons as a percentage of the total labor force, all those individuals either employed or actively looking for employment. Unemployment rates for all adjacent counties and the Commonwealth of Kentucky are compared in Table 15. Floyd County's unemployment rate declined between 1990 and 2000, similar to all other counties in the region and the state as a whole. Declining unemployment was a trend seen across the country between 1990 and 2000. In 2000, Floyd County had a slightly lower unemployment rate (10.0 percent) compared to all adjacent counties (10.4 percent), although, the county had a higher unemployment rate than Kentucky (5.7 percent). The U.S. Census Bureau documented Floyd County unemployment rates of 9.8 percent in 1970 and 10.4 percent in 1980.

Unemployment within Prestonsburg was much lower when compared to the county in 1990; however, the city's 2000 unemployment rate was very similar to the county's rate.

TABLE 15. 1990 and 2000 Unemployment Rates

FLOYD COUNTY COMPARED to ADJACENT COUNTIES and the COMMONWEALTH of KENTUCKY

PLACE	1990	2000
FLOYD COUNTY	12.6%	10.0%
PRESTONSBURG	8.6%	10.2%
ADJACENT COUNTIES	13.5%	10.4%
KENTUCKY	7.4%	5.7%
JOHNSON COUNTY	12.0%	8.4%
KNOTT COUNTY	15.5%	15.6%
LETCHER COUNTY	13.8%	11.0%
MAGOFFIN COUNTY	18.4%	12.8%
MARTIN COUNTY	13.9%	12.8%
PIKE COUNTY	12.6%	8.9%

US Census Bureau, 1990 and 2000 Decennial Censuses.

TABLE 16. 2000 Net Work Flow
FLOYD COUNTY COMPARED to ADJACENT COUNTIES

PLACE	NET WORK FLOW
FLOYD COUNTY	-506
ADJACENT COUNTIES	-1494
JOHNSON COUNTY	-1075
KNOTT COUNTY	-1173
LETCHER COUNTY	-1000
MAGOFFIN COUNTY	-1129
MARTIN COUNTY	92
PIKE COUNTY	2791

US Census Bureau, 2000 Decennial Census.

In 2000, Floyd County was not considered an employment center because it has a negative net work flow. A negative net work flow, experienced by many of the adjacent counties also, indicates that more employees are drawn to employment centers outside of the county because of fewer jobs within the resident county. A positive net work flow indicates that a county draws employees from outside the county to fill employment positions inside the county. Only Pike and Martin Counties experienced a positive net work flow in 2000. Floyd County lost 506 employees to other counties in 2000 (Table 16).

IX. Income and Earnings

Between 1990 and 2000, Floyd County's median household income increased by $5,507 and the per capita income increased by $4,520 (Table 17). In 2000, Floyd County's median household income of $21,168 and per capita income of $12,442 is very similar to the adjacent counties (Table 18). U.S. Census Bureau data also shows that the Commonwealth of Kentucky's median household income and per capita income were much higher than Floyd County's, which can be attributed to higher paying jobs in urban centers across the state, a larger percent of persons participating in the labor force, and lower rates of unemployment. By comparison, the United States' median household income was $41,994 and per capita income was $21,587 in the year 2000.

Between 1990 and 2000, median household income increased by $4,799 for the City of Prestonsburg (Table 17). Prestonsburg's per capita income increased by a significant amount ($7,072) during the same time period.

TABLE 17. 1990 and 2000 Income Characteristics
FLOYD COUNTY and PRESTONSBURG

	FLOYD COUNTY		PRESTONSBURG	
CHARACTERISTICS	**1990**	**2000**	**1990**	**2000**
Median Household Income	$ 15,661	$ 21,168	$ 16,011	$ 20,810
Per Capita Income	$ 7,922	$ 12,442	$ 10,941	$ 18,013
Percent With income Below Poverty Level				
Individuals	31.0%	30.3%	30.1%	27.5%
Families	27.8%	26.2%	23.7%	26.3%

US Census Bureau, 1990 and 2000 Decennial Censuses.

TABLE 18. 2000 Income Characteristics
FLOYD COUNTY COMPARED to ADJACENT COUNTIES and the COMMONWEALTH OF KENTUCKY

CHARACTERISTICS	Floyd County	Adjacent Counties	Kentucky	Johnson County	Knott County	Letcher County	Magoffin County	Martin County	Pike County
Median Household Income	$ 21,168	---*	$ 33,672	$ 24,911	$ 20,373	$ 21,110	$ 19,421	$ 18,279	$ 23,930
Per Capita Income	$ 12,442	---*	$ 18,093	$ 14,051	$ 11,297	$ 11,984	$ 10,685	$ 10,650	$ 14,005
Percent With income Below Poverty Level									
Individuals	30.3%	27.4%	15.8%	26.6%	31.1%	27.1%	36.6%	37.0%	23.4%
Families	26.2%	23.7%	12.7%	21.7%	26.2%	23.7%	31.2%	33.3%	20.6%

US Census Bureau, 1990 and 2000 Decennial Censuses.

Note: Adjacent Counties data is an average of all six adjacent counties, including Johnson, Knott, Letcher, Magoffin and Pike Counties.

* Median Household Income and Per Capita Income cannot be calculated for all adjacent counties as a whole because individual data is not available.

Significant increases in median household income and per capita income have a direct impact on poverty status within the county. While a slightly smaller percentage of Floyd County residents lived below the poverty level in 2000, compared to 1990, Floyd County's poverty rates are still well above the state and national averages. In 2000, 15.8 percent of Kentucky residents and 12.7 percent of Kentucky families lived below the poverty level. Across the nation, 12.4 percent of residents and 9.2 percent of families lived below the poverty level. When comparing Prestonsburg with Floyd County, a smaller percentage of individuals lived below the poverty level and a similar percentage of families lived below the poverty level. Again, poverty levels in Prestonsburg are well above the state and national averages.

X. Conclusions

Floyd County, located in the Appalachian region of Kentucky, is similar to many of its surrounding counties both socially and economically. In general, Pike, Letcher, and Johnson Counties perform better than Floyd County in most economic indicators. Floyd County has the second highest number of housing units (18,551) in the seven county region (Pike County has 30,923), yet it is ranked lower than four other the counties in the number of owner-occupied units. Floyd County is second only to Maggofin County in the percentage of vacant housing units. Floyd County ranks third, of the seven counties, in the percent of population completing high school in 2000 (61.3 percent). While Floyd County has the second highest population over the age of 16 (33,750), only 41.4 percent of those were in the labor force, according to the 2000 Census. This ranked Floyd County fifth among its adjoining counties.

When compared on a regional level, the Floyd County has fewer employment opportunities, a less diversified economy, and lower educational attainment. In addition, lower median incomes result in less buying power for Floyd County residents when compared to the rest of the state. Floyd County continues to lose population similar to many counties in the region.

Appendix A: Resources

Climate

Midwestern Regional Climate Center, July 31, 2003, mcc.sws.uiuc.edu/index.htm. Specific data is from the Jackson Weather Station (154202); temperature and precipitation data from 1971-2000 National Climatic Data Center (NCDC) Normals; snowfall data from 1981-2000 NCDC Normals.

Population

Kentucky State Data Center, 2005 – 2030 Population Projections (Middle Services), August 5, 2003.

US Census Bureau, 1900 – 2000 Decennial Censuses.

Housing, Households and Families

US Census Bureau, 1990 and 2000 Decennial Censuses.

Transportation, Public Utilities and Communication

Kentucky Cabinet for Health Services, Department of Public Health, *2002 Annual Hospital Utilization and Services Report.*

Kentucky Cabinet for Health Services, Department of Public Health, *2002 Kentucky Annual Long-term Care Report.*

Kentucky Public Service Commission, Utilities Listings by County, November 13, 2003.

Kentucky Transportation Cabinet, Division of Multimodal Programs, *Kentucky Bicycle Tours.*

Kentucky Transportation Cabinet, Division of Multimodal Programs, *2002 Kentucky Statewide Rail Plan.*

US Census Bureau, 2000 Decennial Census.

Education

Kentucky Department of Education, District and School Profiles, www.kde.state.ky.us/, December 9, 2003.

Floyd County School District, District Information, http://www.floyd.k12.ky.us/, December 10, 2003.

Prestonsburg Community College, http://www.prestonsburgcc.com/, December 9, 2003.

US Census Bureau, 1990 and 2000 Censuses.

Recreation and Other Public Facilities

Kentucky Department for Libraries and Archives, *Kentucky Library Directory, 2002 – 2003,* www.kdla.ky.gov/2003libdirectory.pdf.

Local Economy, Labor Force and Employment

Big Sandy Area Development District, *Comprehensive Economic Development Strategy*, June 15, 2002.

US Census Bureau, 1990 and 2000 Decennial Censuses.

US Census Bureau, 1998 – 2001 County Business Patterns Data.

US Department of Labor, Bureau of Labor Statistics.

Income and Earnings

US Census Bureau, 1990 and 2000 Decennial Censuses.

APPENDIX B: SURVEY INSTRUMENTS

NONRESIDENTIAL FLOOD DAMAGE SURVEY

(Personal Interview)

OMB 0710-0001

Expires: 30 November 2005

Nonresidential Flood Damage Survey
Structural Questions

Structure No:_____

1. What post office is your mail is sent to? _____
   What community do you live in?_____

2. How long have you occupied this location? _____ years.

3. Do you own or rent your building?
   ____ 1. Own/Buying
   ____ 2. Rent/Lease
   ____ 3. Other

4. How old is your building? _____ years.

5. What are the special things about this location?
   _____
   _____
   _____

6. Would you have moved into this location if you knew it could be flooded?
   1. Yes ____ 2. No ____

7. Do you pay for flood insurance?
   1. Yes ____ 2. No ____

8. How concerned are you about flooding of your property?
   ____ 1. Very concerned
   ____ 2. Somewhat concerned
   ____ 3. Not concerned

9. While at this location, how many times have you experienced flooding?

_____ times.

10. Have you experienced any of the following as a result of floods in this location?

____ 1. Dislocation from work

____ 2. Lost work days and wages

____ 3. Employees missed work

____ 4. Medical expenses

____ 5. Flood damage to your business

11. How would you feel about your building being acquired in order to construct a larger flood protection project that would protect part or all of the community?

____ 1. Strongly Support

____ 2. Support

____ 3. No Opinion

____ 4. Oppose

____ 5. Strongly Oppose

12. If your property was acquired as a flood protection alternative, where would you prefer to operate your business instead?

____ 1. Within the Neighborhood/Community

____ 2. Within the County, but outside of the Neighborhood/Community

____ 3. Within the State, but outside of the County

____ 4. Outside of the State

____ 5. Close business permanently

13. If your property was acquired as a flood protection alternative, what would be your biggest concern(s)? (Check all that apply)

____ 1. Getting a fair price for your property and moving expenses

____ 2. Finding a good location to move to

____ 3. Locating a suitable building

____ 4. Maintaining business relationships and/or customer base

____ 5. Cost of reestablishing business at a new location

____ 6. Other: _____

____ 7. No conerns

14. If a new levee or floodwall were built near your location, what major concerns would you have? (Check all that apply)

____ 1. Its distance from the business

____ 2. Its visibility from the business

____ 3. Its appearance

____ 4. The type of construction (concrete floodwall or earthen levee)

____ 5. Safety during floods

____ 6. Impact on activities around the business

____ 7. Impact on property value

____ 8. Other: _____

____ 9. No concerns

15. As a result of past flooding, many people expressed frustration and need for a more permanent solution to the local flood problems. What do you think would be a good solution to the area's flooding problem? (Check all that apply)

____ 1. Permanent new levees and floodwalls

____ 2. Present city levees, combined with emergency flood fighting, and flood forecasting

____ 3. Channel modifications to reduce flood levels

____ 4. Relocating most-frequently flooded structures

____ 5. Raising and/or flood proofing most-frequently flooded structures

____ 6. Flood insurance and floodplain zoning

____ 7. Other: _____

16. If the U.S. Army Corps of Engineers provided a voluntary program to you that would either raise your building in its current location above the floodplain or acquire your building at fair market value and relocate you to suitable flood-safe location in this area, would you participate in such a program?

A. Raise Structure 1. Yes ____ 2. No ____

B. Acquire Structure 1. Yes ____ 2. No ____

17. Are you receiving enough information about the Corps of Engineers' flood damage reduction study to satisfy your interests?

1. Yes ____ 2. No ____

18. How would you like to be kept informed about this study?

____ 1. Public meetings

____ 2. Newspaper

____ 3. Radio and TV

____ 4. Brochures

____ 5. Other: _____

RESIDENTIAL FLOOD DAMAGE QUESTIONNAIRE

(Personal Interview)

OMB 0710-0001

Expires: 30 November 2005

Residential Flood Damage Survey
Structural Questions

Structure No:_____

---

1. What post office is your mail is sent to? _____
   What community do you live in?_____
2. Please identify the appropriate category that contains your age?

1.	15-19 ____	8.	50-54 ____
2.	20-24 ____	9.	55-59 ____
3.	25-29 ____	10.	60-64 ____
4.	30-34 ____	11.	65-69 ____
5.	35-39 ____	12.	70-74 ____
6.	40-44 ____	13.	75-79 ____
7.	45-49 ____	14.	80 + ____

3. Counting yourself, how many people live in your home? _____

4. What is your current marital status?
   ____ 1. Married
   ____ 2. Divorced
   ____ 3. Widowed
   ____ 4. Single (Never Married)

5. What is the last grade level of school you completed?
   ____ 1. No school
   ____ 2. Grade school (1^{st}-8^{th} grades)
   ____ 3. Some high school (9^{th}-11^{th} grades)
   ____ 4. High school graduate
   ____ 5. Some college (13-15 years)
   ____ 6. College graduate
   ____ 7. Post graduate (17+ years)
   ____ 8. No response/refused

6. What is your current occupational status?

____ 1. Employed/Self Employed

____ 2. Homemaker

____ 3. Temporarily Unemployed

____ 4. Student

____ 5. Retired

____ 6. Disabled

____ 7. Other _____

7. What type of work do you do?

____ 1. Industry

____ 2. Service

____ 3. Business

____ 4. Government

____ 5. Agriculture

____ 6. Education

8a. How far do you travel to get to work? _____ miles.

8b. How long is your commute to work? _____ minutes.

9. On this survey question I am giving you a list of household income ranges. What category best describes the combined income that your household received during the last full year?

____ 1. Less than $25,000

____ 2. $25,000 - $50,000

____ 3. More than $50,000

____ 4. No response/refused

10. What type of structure are you living in?

____ 1. Mobile or Manufactured Home

____ 2. Single-Family Home

____ 3. Apartment

____ 4. Duplex

____ 5. Other

11. How long have you lived in this home? _____ years.

12. Do you own or rent your home?

____ 1. Own/Buying

____ 2. Rent/Lease

____ 3. Other

13. How old is your home? _____ years.

14. On the average, how many times do you and/or your family visit friends/family in the area each week?

_____ times.

15. What are the special things about living in this neighborhood?

_____

_____

_____

16. Would you have moved into this residence if you knew it could be flooded?

1. Yes ____ 2. No ____

17. Do you pay for flood insurance?

1. Yes ____ 2. No ____

18. How concerned are you about flooding of your property?

____ 1. Very concerned

____ 2. Somewhat concerned

____ 3. Not concerned

19. While at this home, how many times have you experienced flooding?

_____ times.

20. Have you experienced any of the following as a result of floods in this residence?

____ 1. Dislocation from work

____ 2. Lost work days and wages

____ 3. Children missed school days

____ 4. Medical expenses

____ 5. Flood damage to your home

21. How would you feel about your home being acquired in order to construct a larger flood protection project that would protect part or all of the community?

____ 1. Strongly Support

____ 2. Support

____ 3. No Opinion

____ 4. Oppose

____ 5. Strongly Oppose

22. If your home was acquired as a flood protection alternative, where would you prefer to live instead?

____ 1. Within the Neighborhood/Community

____ 2. Within the County, but outside of the Neighborhood/Community

____ 3. Within the State, but outside of the County

____ 4. Outside of the State

23. If a new levee or floodwall were built near your home, what major concerns would you have? (Check all that apply)

____ 1. Its distance from the home

____ 2. Its visibility from the home

____ 3. Its appearance

____ 4. The type of construction (concrete floodwall or earthen levee)

____ 5. Safety during floods

____ 6. Impact on activities around the home

____ 7. Impact on property value

____ 8. Other: _____

____ 9. No concerns

24. If your home was voluntarily acquired as a flood protection alternative, what would be your biggest concern(s)? (Check all that apply)

____ 1. Getting a fair price for your home and moving expenses

____ 2. Finding a good neighborhood to move to

____ 3. Locating a suitable house/apartment to live in

____ 4. Maintaining old friendships after moving

____ 5. Finding good schools for your family

____ 6. Cost of purchasing or financing a home

____ 7. Other: _____

____ 8. No concerns

25. If the U.S. Army Corps of Engineers provided a voluntary program to you that would either raise your residence in its current location above the floodplain or acquire your home at fair market value and relocate you to suitable flood-safe replacement housing in this area, would you participate in such a program?

A. Raise Structure 1. Yes ____ 2. No ____

B. Acquire Structure 1. Yes ____ 2. No ____

26. As a result of past flooding, many people expressed frustration and need for a more permanent solution to the community's flood problems. What do you think would be a good solution to the area's flooding problem? (Check all that apply)

____ 1. Permanent new levees and floodwalls

____ 2. Present city levees, combined with emergency flood fighting, and flood forecasting

____ 3. Channel modifications to reduce flood levels

____ 4. Relocating most-frequently flooded structures

____ 5. Raising and/or flood proofing most-frequently flooded structures

____ 6. Flood insurance and floodplain zoning

____ 7. Other: _____

27. Are you receiving enough information about the Corps of Engineers' flood damage reduction study to satisfy your interests?

1. Yes ____ 2. No ____

28. How would you like to be kept informed about this study?

____ 1. Public meetings

____ 2. Newspaper

____ 3. Radio and TV

____ 4. Brochures

____ 5. Other: _____

NONRESIDENTIAL FLOOD DAMAGE SURVEY

(Personal Interview)

OMB 0710-0001

Expires: 30 November 2005

Nonresidential Flood Damage Survey
Nonstructural Questions

Structure No:_____

1. What post office is your mail is sent to? _____
   What community do you live in? _____
2. How long have you occupied this location? _____ years.
3. Do you own or rent your building?
   ____ 1. Own/Buying
   ____ 2. Rent/Lease
   ____ 3. Other
4. How old is your building? _____ years.
5. What are the special things about this location?
   _____
   _____
   _____
6. Would you have moved into this location if you knew it could be flooded?
   1. Yes ____ 2. No ____
7. Do you pay for flood insurance?
   1. Yes ____ 2. No ____
8. How concerned are you about flooding of your property?
   ____ 1. Very concerned
   ____ 2. Somewhat concerned
   ____ 3. Not concerned

9. While at this location, how many times have you experienced flooding?

_____ times.

10. Have you experienced any of the following as a result of floods in this location?

____ 1. Dislocation from work

____ 2. Lost work days and wages

____ 3. Employees missed work

____ 4. Medical expenses

____ 5. Flood damage to your business

11. If the U.S. Army Corps of Engineers provided a voluntary program to you that would either raise your building in its current location above the floodplain or acquire your building at fair market value and relocate you to a suitable flood-safe location in this area, would you participate in such a program?

A. Raise Structure 1. Yes ____ 2. No ____

B. Acquire Structure 1. Yes ____ 2. No ____

12. If your property was acquired as a flood protection alternative, where would you prefer to operate your business instead?

____ 1. Within the Neighborhood/Community

____ 2. Within the County, but outside of the Neighborhood/Community

____ 3. Within the State, but outside of the County

____ 4. Outside of the State

____ 5. Close business permanently

13. If your property was acquired as a flood protection alternative, what would be your biggest concern(s)? (Check all that apply)

____ 1. Getting a fair price for your property and moving expenses

____ 2. Finding a good location to move to

____ 3. Locating a suitable building

____ 4. Maintaining business relationships and/or customer base

____ 5. Cost of reestablishing business at a new location

____ 6. Other: _____

____7. No concerns

14. Are you receiving enough information about the Corps of Engineers' flood damage reduction study to satisfy your interests?

1. Yes ____ 2. No ____

15. How would you like to be kept informed about this study?

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____ 4. Brochures

____ 5. Other: _____

RESIDENTIAL FLOOD DAMAGE QUESTIONNAIRE

(Personal Interview)

OMB 0710-0001

Expires: 30 November 2005

Residential Flood Damage Survey
Nonstructural Questions

Structure No:_____

1. What post office is your mail is sent to? _____
   What community do you live in?_____

2. Please identify the appropriate category that contains your age?

1.	15-19 ____	8.	50-54 ____
2.	20-24 ____	9.	55-59 ____
3.	25-29 ____	10.	60-64 ____
4.	30-34 ____	11.	65-69 ____
5.	35-39 ____	12.	70-74 ____
6.	40-44 ____	13.	75-79 ____
7.	45-49 ____	14.	80 + ____

3. Counting yourself, how many people live in your home? _____

4. What is your current marital status?
   ____ 1. Married
   ____ 2. Divorced
   ____ 3. Widowed
   ____ 4. Single (Never Married)

5. What is the last grade level of school you completed?
   ____ 1. No school
   ____ 2. Grade school (1^{st}-8^{th} grades)
   ____ 3. Some high school (9^{th}-11^{th} grades)
   ____ 4. High school graduate
   ____ 5. Some college (13-15 years)
   ____ 6. College graduate
   ____ 7. Post graduate (17+ years)
   ____ 8. No response/refused

6. What is your current occupational status?

____ 1. Employed/Self Employed

____ 2. Homemaker

____ 3. Temporarily Unemployed

____ 4. Student

____ 5. Retired

____ 6. Disabled

____ 7. Other _____

7. What type of work do you do?

____ 1. Industry

____ 2. Service

____ 3. Business

____ 4. Government

____ 5. Agriculture

____ 6. Education

8a. How far do you travel to get to work? _____ miles.

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9. On this survey question I am giving you a list of household income ranges. What category best describes the combined income that your household received during the last full year?

____ 1. Less than $25,000

____ 2. $25,000 - $50,000

____ 3. More than $50,000

____ 4. No response/refused

10. What type of structure are you living in?

____ 1. Mobile or Manufactured Home

____ 2. Single-Family Home

____ 3. Apartment

____ 4. Duplex

____ 5. Other

11. How long have you lived in this home? _____ years.

12. Do you own or rent your home?

____ 1. Own/Buying

____ 2. Rent/Lease

____ 3. Other

13. How old is your home? _____ years.

14. On the average, how many times do you and/or your family visit friends/family in the area each week?

_____ times.

15. What are the special things about living in this neighborhood?

_____

_____

_____

16. Would you have moved into this residence if you knew it could be flooded?

1. Yes ____ 2. No ____

17. Do you pay for flood insurance?

1. Yes ____ 2. No ____

18. How concerned are you about flooding of your property?

____ 1. Very concerned

____ 2. Somewhat concerned

____ 3. Not concerned

19. While at this home, how many times have you experienced flooding?

_____ times.

20. Have you experienced any of the following as a result of floods in this residence?

____ 1. Dislocation from work

____ 2. Lost work days and wages

____ 3. Children missed school days

____ 4. Medical expenses

____ 5. Flood damage to your home

21. If the U.S. Army Corps of Engineers provided a voluntary program to you that would either raise your residence in its current location above the floodplain or acquire your home at fair market value and relocate you to suitable flood-safe replacement housing in this area, would you participate in such a program?

A. Raise Structure 1. Yes ____ 2. No ____

B. Acquire Structure 1. Yes ____ 2. No ____

22. If your home was voluntarily acquired as a flood protection alternative, where would you prefer to live instead?

____ 1. Within the Neighborhood/Community

____ 2. Within the County, but outside of the Neighborhood/Community

____ 3. Within the State, but outside of the County

____ 4. Outside of the State

23. If your home was voluntarily acquired as a flood protection alternative, what would be your biggest concern(s)? (Check all that apply)

____ 1. Getting a fair price for your home and moving expenses

____ 2. Finding a good neighborhood to move to

____ 3. Locating a suitable house/apartment to live in

____ 4. Maintaining old friendships after moving

____ 5. Finding good schools for your family

____ 6. Cost of purchasing or financing a home

____ 7. Other: _____

____ 8. No concerns

24. As a result of past flooding, many people expressed frustration and need for a more permanent solution to the community's flood problems. What do you think would be a good solution to the area's flooding problem? (Check all that apply)

____ 1. Permanent new levees and floodwalls

____ 2. Present city levees, combined with emergency flood fighting, and flood forecasting

____ 3. Channel modifications to reduce flood levels

____ 4. Relocating most-frequently flooded structures

____ 5. Raising and/or flood proofing most-frequently flooded structures

____ 6. Flood insurance and floodplain zoning

____ 7. Other: _____

25. Are you receiving enough information about the Corps of Engineers' flood damage reduction study to satisfy your interests?

1. Yes ____ 2. No ____

26. How would you like to be kept informed about this study?

____ 1. Public meetings

____ 2. Newspaper

____ 3. Radio and TV

____ 4. Brochures

____ 5. Other: _____

APPENDIX C: DOCUMENTATION OF SURVEYS

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV0058	A	Structural	Residential	X						
LV0059	A	Structural	---						X	Accessory structure for LV 0060
LV0060	A	Structural	---		X					
LV0061	A	Structural	---					X		
LV0062	A	Structural	---			X				
LV0063	A	Structural	---						X	Accessory structure for LV0061
LV0081	A	Structural	---					X		
LV0082	A	Structural	---				X			
LV0083	A	Structural	Residential	X						
LV0084	A	Structural	---		X					
LV0085	A	Structural	Nonresidential	X						Returned via mail to contractor
LV0086	A	Structural	---			X				
LV0087	A	Structural	Residential	X						
LV0088	A	Structural	Residential	X						
LV0089	A	Structural	Residential	X						
LV0090	A	Structural	Residential	X						
LV0091	A	Structural	Residential	X						
LV0092	A	Structural	Residential	X						
LV0093	A	Structural	Residential	X						Returned via mail to contractor
LV0094	A	Structural	Residential	X						
LV0120	A	Structural	Residential	X						
LV0121	A	Structural	Residential	X						
LV0162	A	Structural	---						X	High School is already floodproofed
LV0163	A	Structural	---		X					
LV0164	A	Structural	---						X	Accessory structure for LV0165
LV0165	A	Structural	Residential	X						
LV0166	A	Structural	---			X				
LV0167	A	Structural	---						X	Accessory structure for LV0168
LV0168	A	Structural	Residential	X						
LV0169	A	Structural	---						X	Accessory structure for LV0170
LV0170	A	Structural	Residential	X						
LV0171	A	Structural	Residential	X						
LV0172	A	Structural	Residential	X						Returned via mail to contractor
LV0173	A	Structural	Residential	X						
LV0174	A	Structural	Residential	X						Returned via mail to contractor
LV0175	A	Structural	---		X					
LV0176	A	Structural	Residential	X						
LV0177	A	Structural	Residential	X						
LV0178	A	Structural	Residential	X						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV0179	A	Structural	---		X					
LV0180	A	Structural	---		X					
LV0181	A	Structural	Residential	X						
LV0182	A	Structural	---		X					
LV0183	A	Structural	---						X	Accessory structure for LV0184
LV0184	A	Structural	Residential	X						Returned via mail to contractor
LV0185	A	Structural	Residential	X						
LV0186	A	Structural	---		X					
LV0187	A	Structural	---						X	Accessory structure for LV0188
LV0188	A	Structural	Residential	X						
LV0189	A	Structural	---						X	Accessory structure for LV0190
LV0190	A	Structural	---		X					
LV0191	A	Structural	Nonresidential	X						Returned via mail to contractor
LV0196	A	Structural	Nonresidential	X						
LV0197	A	Structural	Residential	X						
LV0199	A	Structural	---				X			Structure burned December 2002
LV0200	A	Structural	---				X			Structure burned December 2002
LV0201	A	Structural	Nonresidential	X						
LV0202	A	Structural	Residential	X						
LV0252	A	Structural	---		X					
LV0254	A	Structural	Residential	X						
LV0255	A	Structural	---		X					
LV0256	A	Structural	---		X					
LV0257	A	Structural	Nonresidential	X						
LV0691	A	Structural	---		X					
LV0692	A	Structural	Residential	X						
LV0693	A	Structural	Residential	X						
LV0694	A	Structural	Residential	X						
LV2005	A	Structural	---						X	Accessory structure for LV0121
Totals for Zone A				**37**	**13**	**3**	**3**	**2**	**10**	
				68						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV0012	B	Structural	Residential	X						
LV0013	B	Structural	Residential	X						
LV0018	B	Structural	Residential	X						
LV0031	B	Structural	Nonresidential	X						
LV0032	B	Structural	Nonresidential	X						
LV0034	B	Structural	Nonresidential	X						
LV0035	B	Structural	Nonresidential	X						
LV0036	B	Structural	Nonresidential	X						
LV0038	B	Structural	Residential	X						
LV0039	B	Structural	Residential	X						
LV0050	B	Structural	Residential	X						
LV0064	B	Structural	Nonresidential	X						
LV0066	B	Structural	Residential	X						
LV0069	B	Structural	Residential	X						
LV0095	B	Structural	Nonresidential	X						
LV0096	B	Structural	Residential	X						
LV0104	B	Structural	Residential	X						
LV0122	B	Structural	Nonresidential	X						
LV0126	B	Structural	Nonresidential	X						
LV0137	B	Structural	Nonresidential	X						
LV0139	B	Structural	Nonresidential	X						
LV0140	B	Structural	Nonresidential	X						
LV0141	B	Structural	Nonresidential	X						
LV0142	B	Structural	Nonresidential	X						
LV0143	B	Structural	Nonresidential	X						
LV0145	B	Structural	Nonresidential	X						
LV0151	B	Structural	Nonresidential	X						
LV0156	B	Structural	Residential	X						
LV0157	B	Structural	Residential	X						
LV0203	B	Structural	Residential	X						
LV0217	B	Structural	Nonresidential	X						
LV0219	B	Structural	Nonresidential	X						
LV0222	B	Structural	Residential	X						
LV0223	B	Structural	Residential	X						
LV0233	B	Structural	Nonresidential	X						
LV0235	B	Structural	Residential	X						
LV0247	B	Structural	Nonresidential	X						
LV0259	B	Structural	Nonresidential	X						
LV0263	B	Structural	Nonresidential	X						
LV0268	B	Structural	Nonresidential	X						
LV0271	B	Structural	Residential	X						
LV0272	B	Structural	Residential	X						
LV0300	B	Structural	Residential	X						
LV0301	B	Structural	Residential	X						
LV0302	B	Structural	Nonresidential	X						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV0305	B	Structural	Residential	X						
LV0322	B	Structural	Residential	X						
LV0344	B	Structural	Nonresidential	X						
LV0347	B	Structural	Nonresidential	X						
LV0351	B	Structural	Nonresidential	X						
LV0357	B	Structural	Nonresidential	X						
LV0363	B	Structural	Nonresidential	X						
LV0367	B	Structural	Nonresidential	X						
LV0399	B	Structural	Residential	X						
LV0414	B	Structural	Nonresidential	X						
LV0426	B	Structural	Nonresidential	X						
LV0442	B	Structural	Nonresidential	X						
LV0455	B	Structural	Nonresidential	X						
LV0456	B	Structural	Nonresidential	X						
LV0458	B	Structural	Residential	X						
LV0460	B	Structural	Nonresidential	X						
LV0465	B	Structural	Residential	X						
LV0466	B	Structural	Residential	X						
LV0472	B	Structural	Residential	X						
LV0504	B	Structural	Nonresidential	X						
LV0520	B	Structural	Residential	X						
LV0521	B	Structural	Residential	X						
LV0524	B	Structural	Residential	X						
LV0535	B	Structural	Nonresidential	X						
LV0541	B	Structural	Nonresidential	X						
LV0543	B	Structural	Nonresidential	X						
LV0544	B	Structural	Residential	X						
LV0584	B	Structural	Nonresidential	X						
LV0589	B	Structural	Nonresidential	X						
LV0590	B	Structural	Nonresidential	X						
Totals for Zone B				**75**	**0**	**0**	**0**	**0**	**0**	
				75						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV1514	C	Nonstructural	Residential	X						
LV1517	C	Nonstructural	Residential	X						
LV1526	C	Nonstructural	Residential	X						
LV1574	C	Nonstructural	Nonresidential	X						
LV1576	C	Nonstructural	Residential	X						
LV1643	C	Nonstructural	Residential	X						
LV1645	C	Nonstructural	Nonresidential	X						
LV1647	C	Nonstructural	Nonresidential	X						
LV1649	C	Nonstructural	Nonresidential	X						
LV1650	C	Nonstructural	Nonresidential	X						
LV1651	C	Nonstructural	Residential	X						
LV1656	C	Nonstructural	Residential	X						
LV1657	C	Nonstructural	Residential	X						
LV1658	C	Nonstructural	Residential	X						
LV1659	C	Nonstructural	Residential	X						
LV1661	C	Nonstructural	Nonresidential	X						
LV1664	C	Nonstructural	Nonresidential	X						
LV1681	C	Nonstructural	Residential	X						
LV1687	C	Nonstructural	Residential	X						
LV1691	C	Nonstructural	Residential	X						
LV1697	C	Nonstructural	Residential	X						
LV1698	C	Nonstructural	Residential	X						
LV1728	C	Nonstructural	Residential	X						
LV1729	C	Nonstructural	Nonresidential	X						
LV1730	C	Nonstructural	Residential	X						
LV1731	C	Nonstructural	Nonresidential	X						
LV1755	C	Nonstructural	Residential	X						
LV1762	C	Nonstructural	Residential	X						
LV1775	C	Nonstructural	Residential	X						
LV1802	C	Nonstructural	Residential	X						
LV1808	C	Nonstructural	Residential	X						
LV1810	C	Nonstructural	Residential	X						
LV1811	C	Nonstructural	Residential	X						
LV1814	C	Nonstructural	Nonresidential	X						
LV1850	C	Nonstructural	Residential	X						
LV1851	C	Nonstructural	Residential	X						
LV1852	C	Nonstructural	Residential	X						
LV1853	C	Nonstructural	Residential	X						
PB0002	C	Nonstructural	Residential	X						New home
Totals for Zone C				**39**	**0**	**0**	**0**	**0**	**0**	
				39						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LP0026	D	Nonstructural	Residential	X						
LV0710	D	Nonstructural	Residential	X						
LV0738	D	Nonstructural	Residential	X						
LV0926	D	Nonstructural	Residential	X						
LV1036	D	Nonstructural	Residential	X						
LV1037	D	Nonstructural	Residential	X						
LV1043	D	Nonstructural	Residential	X						
LV1162	D	Nonstructural	Residential	X						
LV1163	D	Nonstructural	Residential	X						
LV1165	D	Nonstructural	Residential	X						
LV1186	D	Nonstructural	Nonresidential	X						
LV1187	D	Nonstructural	Nonresidential	X						
LV1199	D	Nonstructural	Residential	X						
LV1202	D	Nonstructural	Residential	X						
LV1203	D	Nonstructural	Residential	X						
LV1205	D	Nonstructural	Residential	X						
LV1230	D	Nonstructural	Nonresidential	X						
LV1289	D	Nonstructural	Residential	X						
LV1324	D	Nonstructural	Residential	X						
LV1332	D	Nonstructural	Nonresidential	X						
LV1334	D	Nonstructural	Residential	X						
LV1336	D	Nonstructural	Residential	X						
LV1348	D	Nonstructural	Residential	x						
LV1350	D	Nonstructural	Residential	X						
LV1353	D	Nonstructural	Residential	X						
LV1358	D	Nonstructural	Residential	X						
LV1359	D	Nonstructural	Nonresidential	X						
LV1384	D	Nonstructural	Nonresidential	X						
LV1388	D	Nonstructural	Residential	X						
LV1394	D	Nonstructural	Residential	X						
LV1395	D	Nonstructural	Residential	X						
LV1396	D	Nonstructural	Residential	X						
LV1404	D	Nonstructural	Nonresidential	X						
LV1418	D	Nonstructural	Nonresidential	X						
LV1431	D	Nonstructural	Nonresidential	X						
LV1432	D	Nonstructural	Nonresidential	X						
LV1857	D	Nonstructural	Residential	X						
LV1868	D	Nonstructural	Residential	X						
Totals for Zone D				**38**	**0**	**0**	**0**	**0**	**0**	
				38						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV0516	E	Nonstructural	Residential	X						
LV0573	E	Nonstructural	Residential	X						
LV0575	E	Nonstructural	Residential	X						
LV0581	E	Nonstructural	Residential	X						
LV0583	E	Nonstructural	Residential	X						
LV0653	E	Nonstructural	Nonresidential	X						
LV0654	E	Nonstructural	Nonresidential	X						
LV0660	E	Nonstructural	Residential	X						
LV0661	E	Nonstructural	Residential	X						
LV0662	E	Nonstructural	Residential	X						
LV0665	E	Nonstructural	Residential	X						
LV0666	E	Nonstructural	Residential	X						
LV0668	E	Nonstructural	Residential	X						
LV0669	E	Nonstructural	Residential	X						
LV0676	E	Nonstructural	Residential	X						
LV0677	E	Nonstructural	Residential	X						
LV0680	E	Nonstructural	Residential	X						
LV0682	E	Nonstructural	Residential	X						
LV0688	E	Nonstructural	Nonresidential	X						
LV0836	E	Nonstructural	Nonresidential	X						
LV0847	E	Nonstructural	Residential	X						
LV0860	E	Nonstructural	Residential	X						
LV1902	E	Nonstructural	Residential	X						
LV1904	E	Nonstructural	Nonresidential	X						
LV1905	E	Nonstructural	Nonresidential	X						
LV1906	E	Nonstructural	Nonresidential	X						
LV1908	E	Nonstructural	Nonresidential	X						
LV1918	E	Nonstructural	Nonresidential	X						
LV1919	E	Nonstructural	Nonresidential	X						
LV2234	E	Nonstructural	Nonresidential	X						
LV2235	E	Nonstructural	Nonresidential	X						
LV2239	E	Nonstructural	Residential	X						
LV2243	E	Nonstructural	Residential	X						
LV2245	E	Nonstructural	Residential	X						
LV2252	E	Nonstructural	Residential	X						
LV2254	E	Nonstructural	Nonresidential	X						
LV2260	E	Nonstructural	Residential	X						
LV2269	E	Nonstructural	Residential	X						
LV2270	E	Nonstructural	Nonresidential	X						
LV2274	E	Nonstructural	Residential	X						
LV2284	E	Nonstructural	Residential	X						
LV2288	E	Nonstructural	Residential	X						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV2289	E	Nonstructural	Residential	X						
LV2291	E	Nonstructural	Residential	X						
LV2302	E	Nonstructural	Residential	X						
LV2304	E	Nonstructural	Residential	X						
LV2309	E	Nonstructural	Residential	X						
LV2310	E	Nonstructural	Residential	X						
LV2311	E	Nonstructural	Residential	X						
LV2314	E	Nonstructural	Residential	X						
LV2318	E	Nonstructural	Residential	X						
LV2319	E	Nonstructural	Residential	X						
LV2320	E	Nonstructural	Residential	X						
LV2328	E	Nonstructural	Nonresidential	X						
LV2329	E	Nonstructural	Residential	X						
LV2336	E	Nonstructural	Residential	X						
LV2337	E	Nonstructural	Residential	X						
LV2344	E	Nonstructural	Residential	X						
LV2345	E	Nonstructural	Residential	X						
LV2347	E	Nonstructural	Residential	X						
LV2360	E	Nonstructural	Nonresidential	X						
LV2365	E	Nonstructural	Nonresidential	X						
LV2367	E	Nonstructural	Residential	X						
LV2369	E	Nonstructural	Residential	X						
LV2378	E	Nonstructural	Residential	X						
LV2379	E	Nonstructural	Residential	X						
LV2389	E	Nonstructural	Nonresidential	X						
LV2390	E	Nonstructural	Residential	X						
LV2393	E	Nonstructural	Residential	X						
LV2395	E	Nonstructural	Residential	X						
LV2397	E	Nonstructural	Residential	X						
LV2405	E	Nonstructural	Residential	X						
LV2407	E	Nonstructural	Residential	X						
LV2411	E	Nonstructural	Residential	X						
LV2414	E	Nonstructural	Residential	X						
LV2422	E	Nonstructural	Residential	X						
LV2423	E	Nonstructural	Residential	X						
LV2433	E	Nonstructural	Residential	X						
LV2440	E	Nonstructural	Residential	X						
LV2444	E	Nonstructural	Residential	X						
LV2454	E	Nonstructural	Nonresidential	X						
LV2457	E	Nonstructural	Nonresidential	X						
LV2458	E	Nonstructural	Nonresidential	X						
LV2563	E	Nonstructural	Residential	X						
Totals for Zone E				**84**	**0**	**0**	**0**	**0**	**0**	
				84						

Community Cohesion Surveys

Floyd County

Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
BK0025	F	Nonstructural		X						
BK0026	F	Nonstructural		X						
BK0029	F	Nonstructural		X						
BK0034	F	Nonstructural		X						
BK0077	F	Nonstructural		X						
BK0092	F	Nonstructural		X						
BL0014	F	Nonstructural		X						
BL0016	F	Nonstructural		X						
BL0043	F	Nonstructural		X						
BL0142	F	Nonstructural		X						
BL0168	F	Nonstructural		X						
BL0170	F	Nonstructural		X						
BL0173	F	Nonstructural		X						
BL0316	F	Nonstructural		X						
LV2463	F	Nonstructural		X						
LV2464	F	Nonstructural		X						
LV2475	F	Nonstructural		X						
LV2476	F	Nonstructural		X						
LV2512	F	Nonstructural		X						
LV2513	F	Nonstructural		X						
LV2515	F	Nonstructural		X						
LV2516	F	Nonstructural		X						
LV2517	F	Nonstructural		X						
LV2519	F	Nonstructural		X						
LV2520	F	Nonstructural		X						
LV2521	F	Nonstructural		X						
LV2525	F	Nonstructural		X						
LV2528	F	Nonstructural		X						
LV2529	F	Nonstructural		X						
LV2530	F	Nonstructural		X						
LV2531	F	Nonstructural		X						
LV2534	F	Nonstructural		X						
LV2535	F	Nonstructural		X						
LV2573	F	Nonstructural		X						
LV2575	F	Nonstructural		X						
LV2576	F	Nonstructural		X						
LV2578	F	Nonstructural		X						
LV2581	F	Nonstructural		X						
LV2584	F	Nonstructural		X						
LV2585	F	Nonstructural		X						
LV2591	F	Nonstructural		X						
LV2594	F	Nonstructural		X						
LV2595	F	Nonstructural		X						
LV2601	F	Nonstructural		X						
LV2610	F	Nonstructural		X						

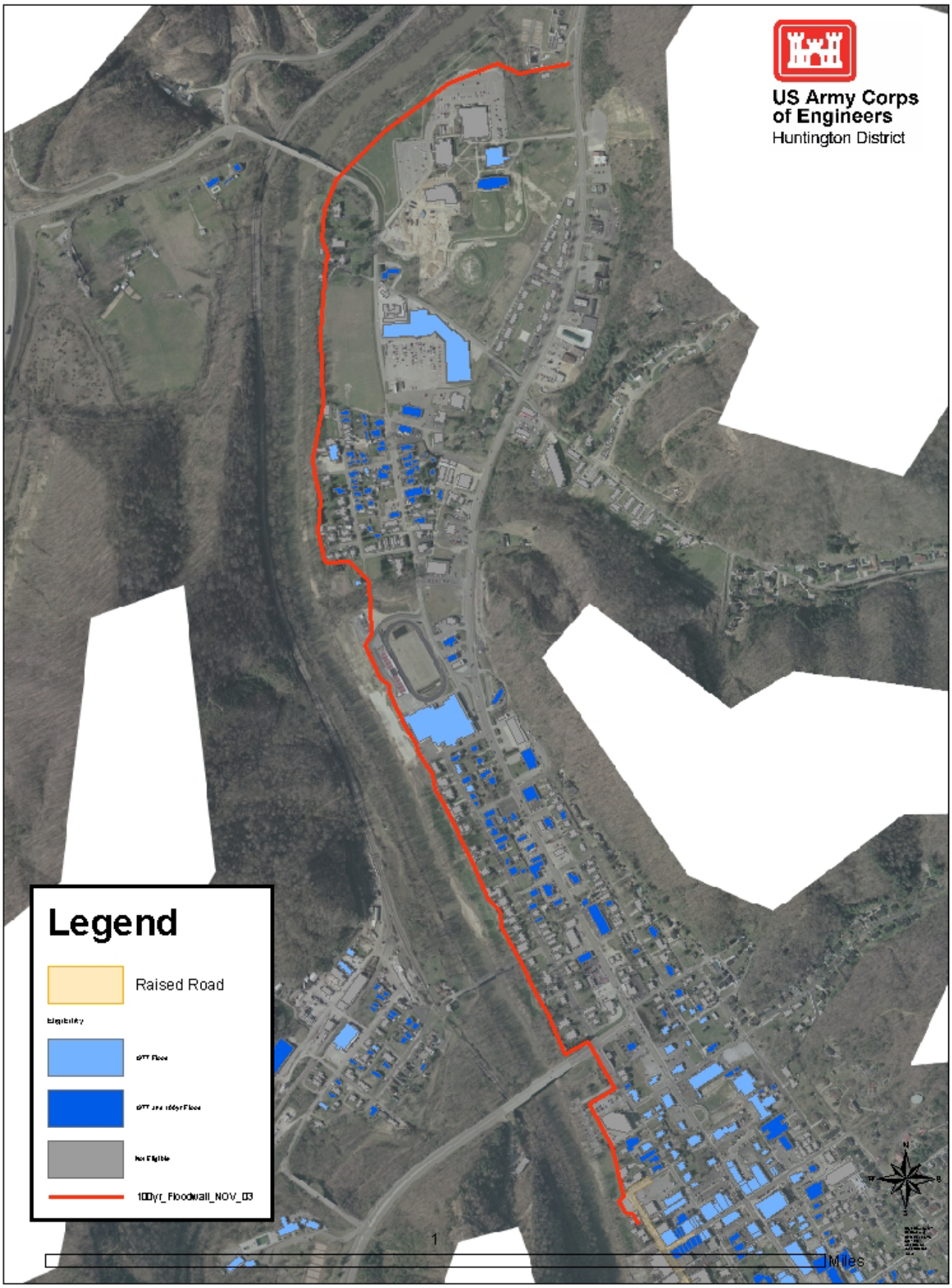
Community Cohesion Surveys

Floyd County

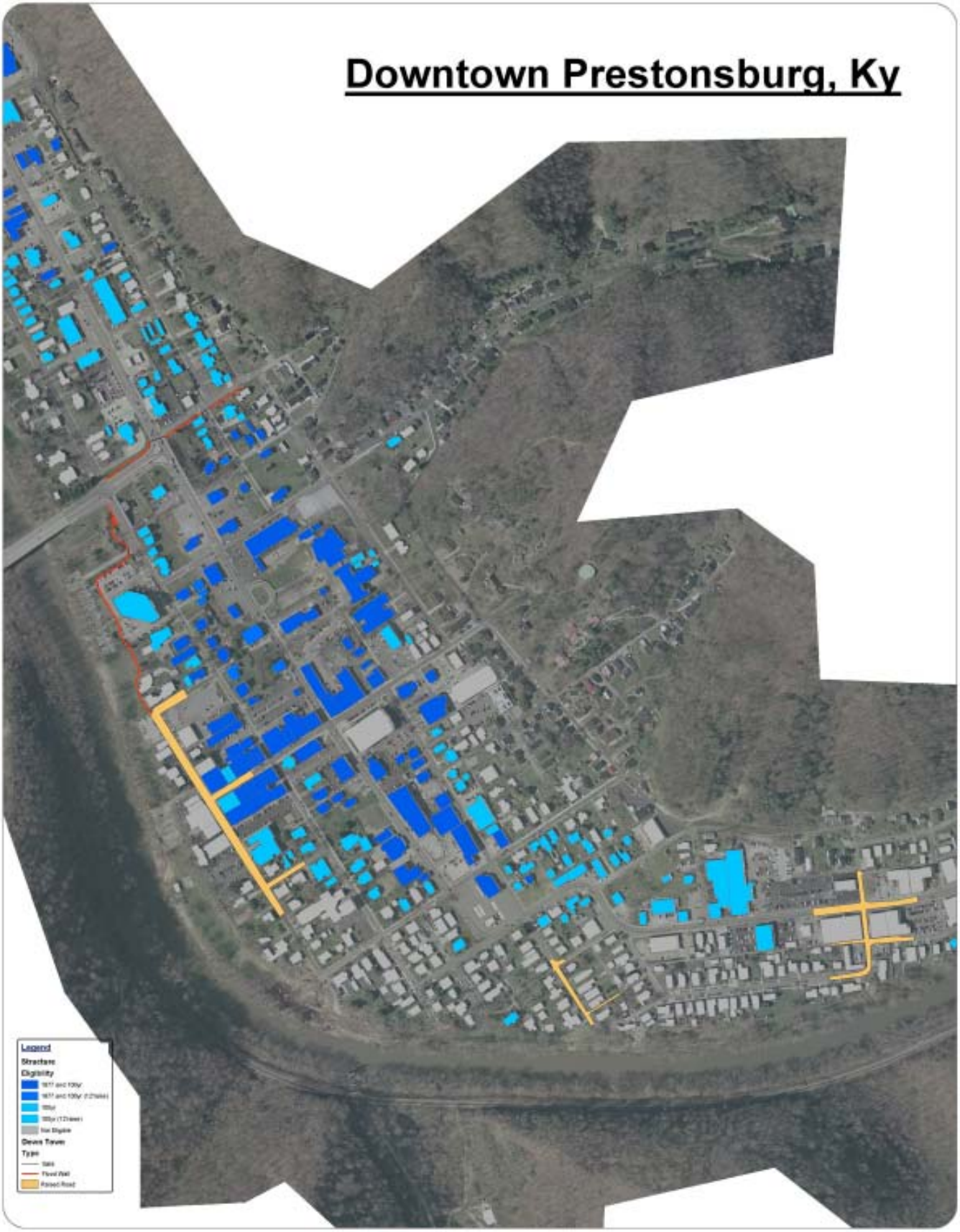
Structure Number	Zone	Structure Type	Survey Type	Survey Status						Notes
				Completed	Not Returned by Resident	Building Vacant	Demolished	Declined	Other	
LV2611	F	Nonstructural		X						
LV2612	F	Nonstructural		X						
LV2613	F	Nonstructural		X						
LV2628	F	Nonstructural		x						
LV2643	F	Nonstructural		X						
LV2644	F	Nonstructural		X						
LV2646	F	Nonstructural		X						
LV2650	F	Nonstructural		X						
LV2657	F	Nonstructural		X						
LV2666	F	Nonstructural		X						
LV2677	F	Nonstructural		X						
LV2678	F	Nonstructural		X						
Totals for Zone F				**57**	**0**	**0**	**0**	**0**	**0**	
				57						

APPENDIX D: EXHIBITS OF FLOODWALL AND LEVEE ALTERNATIVES AND SIMULATIONS

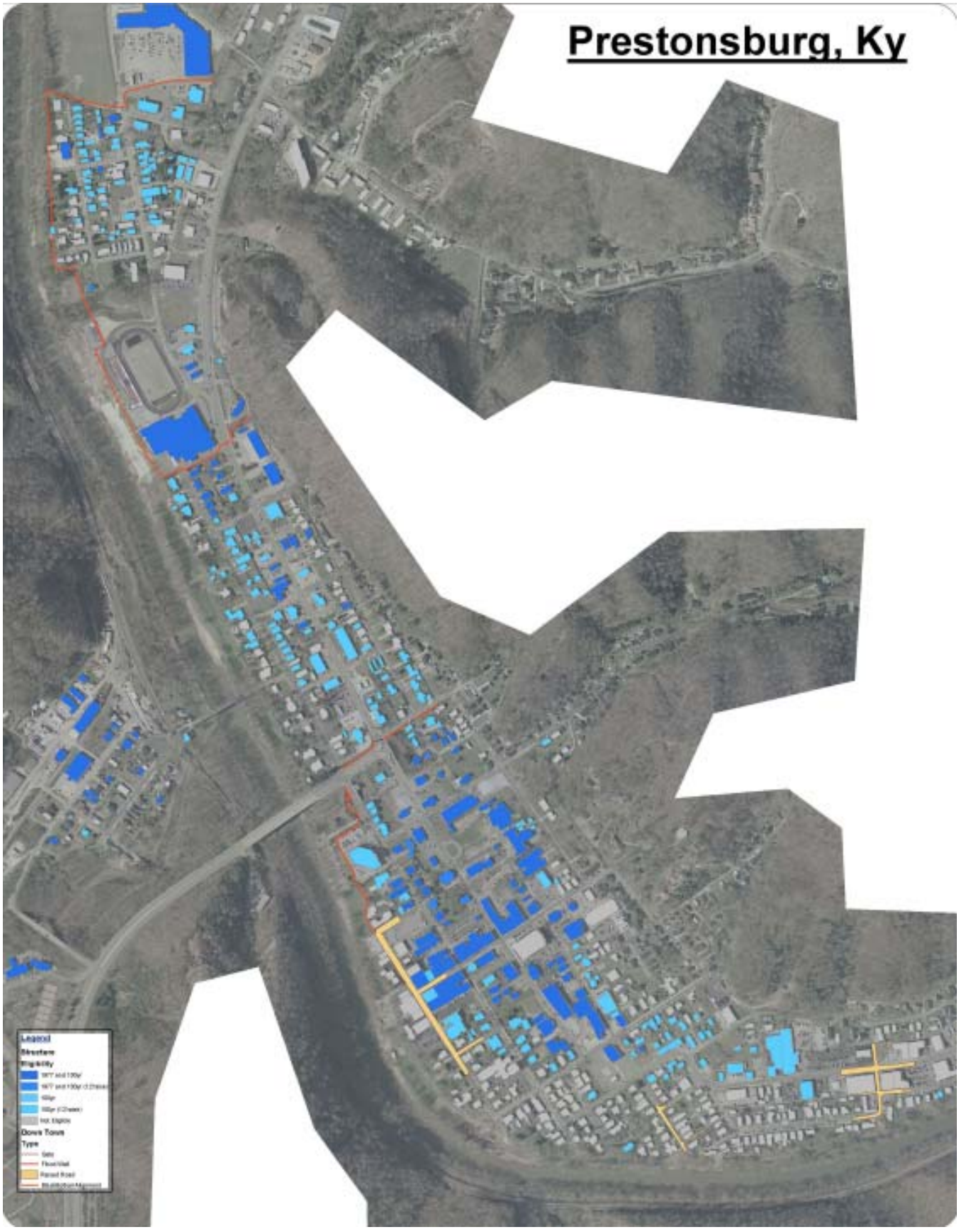
Alternative 2: Long Floodwall ending at the Big Sandy Community and Technical College



Alternative 4: Downtown Prestonsburg Short Floodwall



Alternative 5: Downtown Prestonsburg Short Floodwall + Blackbottom Floodwall



Alternative 6: Blackbottom Floodwall

Existing Downtown Prestonsburg with 100-Year Simulated Flood

Existing Downtown Prestonsburg with Simulated Floodwall

Existing Downtown Prestonsburg with Simulated Floodwall

APPENDIX E: HISTORIC SECTION 202 PROGRAM PARTICIPATION RATES AND FLOYD COUNTY PARTICIPATION PROJECTIONS

Historic Section 202 Program Participation Rates

PROJECT	Total Tracts Eligible	% FP	% Acq.	FP Tracts			Acq. Tracts			Total % Applied	Acq. To Date	Acq. Prior Month	% Acq. of Applied	Time Elapsed
				Eligible	Applied	% Applied	Eligible	Applied	% Applied					
Data included														
Wayne County Nonstructural Project	91	74%	26%	67	38	57%	24	15	63%	58%	17	0	113%	60%
Lower Mingo Nonstructural Project	537	43%	57%	229	180	79%	308	272	88%	84%	229	0	84%	88%
Upper Mingo Nonstructural Project	211	47%	53%	99	82	83%	112	78	70%	76%	61	0	78%	80%
Pike County Nonstructural Project	424	51%	49%	218	173	79%	206	165	80%	80%	128	0	78%	83%
Totals	**1263**	**48.5%**	**51.5%**	**613**	**473**	**77.2%**	**650**	**530**	**81.5%**		**435**	**0**	**82%**	
Data excluded														
Grundy				37	4	11%	9	4	44%	17%	3	0	75%	33%
Martin County Nonstructural				295	188	64%	94	90	96%	71%	40	0	44%	38%
McDowell County Nonstructural Project				369	3	1%	601	42	7%	5%	18	0	43%	7%
Hatfield Bottom Nonstructural Project	21	---	100%	No Data	No Data	No Data	21	12	57%	No Data	11	0	92%	100%
Matewan Nonstructural Project	43	---	100%	No Data	No Data	No Data	43	27	63%	No Data	22	0	81%	100%
South Williamson Nonstructural Project	203	---	100%	No Data	No Data	No Data	203	146	72%	No Data	146	0	100%	100%
Williamson Nonstructural Project	112	---	100%	No Data	No Data	No Data	112	99	88%	No Data	99	0	100%	100%
Totals				**701**	**195**	**28%**	**1083**	**420**	**39%**	**34%**	**339**	**0**	**81%**	**N/A**

Floyd County Projected Participation Rates

FLOYD COUNTY ESTIMATES	Total Tracts Eligible	Estimated FP Tracts	Estimated Acq. Tracts	FP Tracts			Acq. Tracts		
				Estimated FP Tracts	Historic Application Rate	Estimated % Applied	Estimated Acq. Tracts	Historic Application Rate	Estimated % Applied
Floyd County, DPR I	**626**	304	322	304	77.2%	234	322	81.5%	263
Alternative 1 (Zones A & B)	**311**	151	160	151	77.2%	116	160	81.5%	131
Alternative 1 (Zones C-X)	**315**	153	162	153	77.2%	118	162	81.5%	132
Alternative 2 (Long Floodwall)	**311**	151	160	151	77.2%	116	160	81.5%	131
Alternative 3 (Blackbottom Cutoff Long Floodwall)	**308**	149	159	149	77.2%	115	159	81.5%	129
Alternative 4 (Short Floodwall)	**170**	83	87	83	77.2%	64	87	81.5%	71
Alternative 5 (Blackbottom Floodwall)	**63**	31	32	31	77.2%	24	32	81.5%	26
Alternative 6 (Short & Blackbottom Floodwalls)	**233**	113	120	113	77.2%	87	120	81.5%	98

NOTES:

1. Application numbers indicate only that the owner applied. The owner may have subsequently withdrawn.
2. Wayne County 41 additional applications - Status unknown.

Assumptions

1. Any project that has not yet reached 50% completion of the implementation phase is not included in the calculated historic participation rate. It is assumed that those project with less than 50% completion may still be accepting additional applications.
2. Historic participation rates are calculated using the available data from each of the previous Section 202 projects.
3. Floodproofing data is not available for the four projects which are 100% complete, therefore they were not included to avoid skewing the data.